PERFORMANCE REPORT

Natural Resources Canada

For the period ending
March 31, 2008

The Honourable Lisa Raitt, P.C., M.P.
Minister of Natural Resources

PERFORMANCE REPORT

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Minister's Message

It is my pleasure to present the Departmental Performance Report for Natural Resources Canada (NRCan) for the period ending March 31, 2008.

Canada's great wealth of natural resources remains a vital part of our economy. Since 2002, we have enjoyed a significant commodities boom, driven by a sustained period of expansion and robust growth in the global economy. Strong demand for natural resources, led primarily by the United States and large emerging economies such as China, resulted in surging commodity prices.

The conditions that drove this increase are anticipated to re-emerge when the economy recovers from the current downturn. Thus, over the long term, prices for Canadian resource commodities are expected to remain high compared to historical standards. This is the prevailing consensus despite the recent downward trend.

NRCan identified five priorities in its 2007-08 Report on Plans and Priorities critical to the realization of its strategic outcomes and expected results. These priorities shape our integrated effort in the delivery of our policies, programs and science and technology to ensure the sustainable development and responsible use of our mineral, energy and forest resources.

Clean Air for all Canadians — NRCan worked closely with Environment Canada to finalize the Regulatory Framework for Industrial Greenhouse Gas Emissions and to develop a horizontal framework for the effective inter-departmental management of climate change and clean air programming. Moreover, the ecoENERGY initiatives — our contribution to Canada's ecoACTION plan — are helping Canadians become more efficient consumers of energy in their homes, businesses and vehicles by encouraging choices that save energy and money and protect our environment.

Smarter, Faster and More Effective Regulations — Even as Canada's natural resource sectors position themselves to weather the current economic downturn, other structural challenges remain. Many of these are common across all resource industries. Until recently, for example, the federal regulatory review process for major resource projects was frustrating for both industry and investors. I am proud that we took decisive action this past year to address these concerns by establishing the Major Projects Management Office. This new office provides stakeholders with a single point of entry into the federal regulatory process and will improve the timelines and consistency

of federal regulatory decisions. This initiative will also improve the competitiveness of Canada's resource industries while providing the scientific and technical capacity needed to uphold Canada's world-class environmental and social standards.

Enhancing Canada's Forest Sector Competitiveness — Our Government is determined to create a more prosperous future for Canada's forest sector. Throughout the past year, we worked closely with stakeholders to foster new opportunities and innovation. Among other actions, we created the Forest Industry Long-Term Competitiveness Strategy to support innovation, tap into new markets and help the forest sector develop value-added products. We also supported the creation of the world's largest public–private partnership in forest research and development — FPInnovations.

Mitigating the Impact of the Mountain Pine Beetle (MPB) — Forest ecosystems are vulnerable to threats from natural and man-made disturbances such as pest infestation, wildfire and climate change. These same threats can also directly affect industry and the communities that depend upon forest products. Accordingly, our Government allocated $200 million to help combat the MPB infestation in British Columbia and Alberta. This funding is supporting a multi-pronged effort to mitigate the impacts of the beetle infestation.

Strengthening Canada's Mining Industry — In the mining sector, our Government continued to position itself as a leader in research and innovation through the revitalization of, and decision to relocate the CANMET Materials Technology Laboratory and by supporting the Canadian Mining Innovation Council. We were instrumental in developing the *Donkin Coal Block Opportunity Act* in an effort to bring economic and social benefits to the province of Nova Scotia. NRCan also used its geoscience expertise to help discover new resource deposits which create further economic opportunities for Canadians.

By pursuing these and many other initiatives, our Government is demonstrating its commitment to taking real action on issues that are of great importance to Canadians: tackling climate change, increasing the competitiveness of Canadian industry, making advances in innovation, and developing science and technology. In partnership with provinces, territories and the private sector, our Government is making important progress to ensure that we secure a strong resource future for Canadians.

The Honourable Lisa Raitt, P.C., M.P.
Minister of Natural Resources

STATEMENT

I submit, for tabling in Parliament, the 2007-08 Departmental Performance Report (DPR) for Natural Resources Canada.

This document has been prepared based on the reporting principles contained in the *Guide to the Preparation of Part III of the 2007-08 Estimates: Report on Plans and Priorities and Departmental Performance Report.*

- It adheres to the specific reporting requirements outlined in the Treasury Board Secretariat guidance.
- It is based on the department's strategic outcomes and program activities that were approved by the Treasury Board.
- It presents consistent, comprehensive, balanced and reliable information.
- It provides a basis of accountability for the results achieved with the resources and authorities entrusted to it.
- It reports finances based on approved planned spending numbers from the Treasury Board Secretariat.

Cassie J. Doyle
Deputy Minister

NRCan develops, implements and delivers integrated policies, programs, and science and technology (S&T) for the sustainable development and responsible use of Canada's minerals, metals, energy and forestry resources. The department uses its expertise in earth sciences to collect and disseminate information used to better understand Canada's landmass. The department also maintains key roles related to the safety and security of people and natural resources, including the regulation of explosives and the security of natural resource infrastructure and supply. It represents Canada at the international level to meet the country's global commitments related to natural resources.

NRCan's Minister is responsible for, or has responsibilities under, more than 30 Acts of Parliament. The core powers, duties and functions are set forth in the *Department of Natural Resources Act*, the *Resources and Technical Surveys Act* and the *Forestry Act*. The remaining Acts set out the terms for the management of Crown lands and of Canada's natural resource policies, including energy and nuclear policy.

The department's work is concentrated in areas of core federal jurisdiction that fall within its legislated roles and responsibilities, which include:

- national objectives related to economic development, environmental protection, supply security and resource-related health and safety;
- natural resource management for Crown lands, the North and offshore areas;
- uranium and nuclear power; and
- international and interprovincial trade.

In carrying out these responsibilities, NRCan works closely with other federal departments with resource-related responsibilities and supports the federal role in regional development and Aboriginal affairs in matters related to the resource sectors. NRCan also works in areas of shared responsibility with the provinces.

Financial Resources ($M)

Main Estimates	Total Authorities	Actual Spending
2,145.1	3,540.4	3,341.1

Human Resources (FTEs)

Planned	Actual	Difference
4,289	4,320	31

Departmental Results Structure

Strategic Outcome: Canadians derive sustainable social and economic benefits from the assessment, development and use of energy, forest and mineral resources, and have the knowledge to mitigate environmental impacts and respond effectively to natural and man-made hazards

NRCan manages its program delivery through one strategic outcome and four major program activities: Earth Sciences, Energy, Sustainable Forest, and Minerals and Metals. Each of NRCan's program activities is divided into smaller groups of activities that are designed to achieve intermediate outcomes that collectively contribute to the realization of the overall departmental strategic outcome. The Corporate Management program activity provides internal support and enables the delivery of other departmental programs.

Earth Sciences	Energy	Sustainable Forest	Minerals & Metals
Earth sciences knowledge and tools enable Canadians to achieve economic opportunities, a clean environment, and adapt to a changing climate, in safety and security	Canadians benefit economically, environmentally, and socially from the sustainable production, development and use of Canada's abundant energy resources	Healthy forests continue to provide balanced social, environmental and economic benefits to Canadians	Canadians derive sustainable social and economic net benefits from the assessment, development and use of mineral expertise, mineral resources, and related industries
New economic opportunities created for Canadians	Domestic and international energy policy analysis, development and advice that supports the sustainable development of Canada's energy sector	An integrated national forest sector innovation system that addresses current and emerging issues	Investment in Canada's exploration and mining industries is strengthened
Reduced stress on the environmental ecosystems and human health	Sustainable development and safe and reliable delivery of electricity with a reduced environmental footprint	Canada's forest industry competes successfully in the global forest products market	Market access for mineral and metal commodities (including recyclables) and related industries is promoted and, where necessary, protected
Canadians and their institutions understand and prepare for the effects of a changing climate	A fair, efficient and competitive oil, natural gas and petroleum products marketplace that is consistent with Canada's social and environmental goals	Forest losses are addressed through the provision of balanced social, economic and environmental information and advice	Canada's international prominence and investment in mining are secured
Increased safety and security of Canadians	Improved energy efficiency of all sectors and increased production and use of alternative transportation fuels in Canada	Canada is a globally-recognized leader of forest sector sustainability	Canadians benefit from R&D with respect to minerals, metals and value-added products
	Canadians derive new economic, environmental and social benefits through federal energy S&T	Canada's climate change forest reporting obligations are met, and forest-based options for adaptation to, and mitigation of, climate change are developed	Safety and security of workers and the public throughout Canada are improved with respect to explosives
		Forest-dependent communities have choices and options for economic opportunities	Canadians are provided with information to improve decisions regarding minerals and metals
			Regulatory programs meet Government of Canada objectives
			Policies enhance the productivity and sustainability of the minerals and metals industries

Corporate Management Program Activity

NRCan is enabled by supportive corporate management functions

NRCan identified the following program priorities as critical to the realization of the strategic outcome. These priorities shape our integrated effort in the delivery of our policies, programs and science and technology (S&T).

Priorities	Type*	Assessment of Progress Toward Priorities
1. Clean Air for all Canadians	Previously committed	On track
2. Smarter, Faster and More Effective Regulation	Ongoing	On track
3. Enhancing Canada's Forest Sector Competitiveness	Previously committed	On track
4. Mitigating the Impact of the Mountain Pine Beetle Infestation	Previously committed	On track
5. Strengthening Canada's Mining Industry	Ongoing	On track

* An ongoing priority has no end date; a previously committed priority has an estimated end date and was committed to in prior budgets or main estimates documents.

Strategic Outcome Canadians derive sustainable social and economic benefits from the assessment, development and use of energy, forest and mineral resources, and have the knowledge to mitigate environmental impacts and respond effectively to natural and man-made hazards				
Program Activity	Expected Results	Spending[1] ($ millions)		Contributes to the following priority (or statutory obligations)
		Planned	Actual	
Earth Sciences[2]	Earth sciences knowledge and tools enable Canadians to achieve economic opportunities, a clean environment, and adapt to a changing climage, in safety and security	233.8	251.6	Clean Air for All Canadians Strengthening Canada's Mining Industry
Energy[3]	Canadians benefit economically, environmentally and socially from the sustainable production, development and use of Canada's abundant energy resources	543.3	419.1	Clean Air for All Canadians Smarter, Faster and More Effective Regulation
Sustainable Forest[4]	Healthy forests continue to provide balanced social, environmental and economic benefits to Canadians	268.3	206.7	Enhancing Canada's Forest Sector Competitiveness Mitigating the Impact of the Mountain Pine Beetle Infestation
Minerals and Metals[5]	Canadians derive sustainable social and economic net benefits from the assessment, development and use of mineral expertise, mineral resources, and related industries	57.5	75.7	Clean Air for all Canadians Smarter, Faster and More Effective Regulation Strengthening Canada's Mining Industry
Sub-Total		**1,102.9**	**953.1**	
Statutory Payments for Atlantic Offshore				
Energy[6]	Canadians benefit economically, environmentally and socially from the sustainable production, development and use of Canada's abundant energy resources	1,050.6	2,388.0	Statutory Obligations
Total NRCan		**2,153.5**	**3,341.1**	

1. The resources for the Corporate Management Program Activity are distributed across all other program activities.
2. Includes Earth Sciences – Geomatics Canada Revolving Fund.
3. Actual spending was less than planned as $100 million in program expenditures were deferred to future years.
4. Actual spending was less than planned for the Federal Response to the Mountain Pine Beetle Infestation in British Columbia because funding in the amount of $43.6 million was transferred to Western Economic Diversification and to Transport Canada, thereby reducing planned expenditures within NRCan. Moreover, funding for the Forest Industry Long Term Competitiveness Initiative in the amount of $10.4 million was deferred for future year spending.
5. Actual spending was higher than anticipated in program management and support in the amount of $13.6 million which reflects a change in reporting of some corporate activities (i.e. shared services, communications and information technology). Funding received via the Supplementary Estimates for the Relocation and Renewal of the CANMET Laboratories of $2.2 million also contributed to higher than planned spending.
6. Actual spending includes the following statutory payments: Nova Scotia Offshore Revenue Account $493.2 million; Newfoundland Offshore Petroleum Resource Revenue Fund $1.7 billion; and Newfoundland Fiscal Equalization Offset Payments $188.6 million. These expenditures were largely offset by oil and gas royalty revenues received during the year ($1.7 billion). Pursuant to the Atlantic Offshore Accords, NRCan receives the federal royalty revenues related to the offshore – which were greater than planned due to significant increases in oil prices and production – and subsequently makes payments to the provinces equivalent to the royalty revenues received. Refer to page 72 for more information on revenues.

NRCan's strategic context is framed by the three spheres of Canada's natural resource sectors:

- our rich natural resource endowment;
- the people of Canada and their ideas (i.e., their expectations, knowledge, skill and ingenuity); and
- the public and private sector systems that link people and ideas to resources.

Within this broad resource-sector framework, NRCan's activities during fiscal 2007-08 were directed towards the realization of our strategic outcome: *Canadians derive sustainable social and economic benefits from the assessment, development and use of energy, forest and mineral resources, and have the knowledge to mitigate environmental impacts and respond effectively to natural and man-made hazards.* This strategic outcome has three key elements:

- economic development;
- environmental responsibility; and
- safety, security and stewardship.

During 2007-08, the global economic environment for natural resources remained strong; however, not all of Canada's resource sectors benefited equally. The energy sector remains very strong, while at the same time Canada's economy grew faster than primary energy consumption indicating improvements in energy efficiency. The minerals and metals sector remained strong with 2007 being a record year for exploration investment.

The forest sector continues to face a range of significant economic and technological challenges, while the ongoing mountain pine beetle (MPB) infestation ravages forests in western Canada.

The imperative for strong and clearly visible environmental responsibility in the resource sectors strengthened over 2007-08. Canadians and the world expect that resource exploration and development should benefit the economy and society, with due consideration for environmental integrity. Clean air, a changing climate, and the response of ecosystems to resource exploration and development were key global resource sectors issues in 2007-08. For the Canadian resource sector, the environmental responsibility agenda is evolving so as to cut across traditional sector boundaries; for example, oil sands development is impacting global perceptions of the sustainable management of the Canadian boreal forest.

The intensity of international interest in the Arctic continued to increase in 2007-08 as a result of the long-term trend of reduced Arctic sea ice.

Other than the ongoing MPB infestation, natural disasters, resource exploration and development hazards stayed within historic average limits during 2007-08.

Our Program Priorities

Clean Air for all Canadians — In 2007-08, clean air for all Canadians was a key priority for NRCan. With the introduction of the Clean Air Agenda, the Government has committed to reduce greenhouse gas (GHG) emissions and improve air quality for Canadians. The centrepiece of this approach is mandatory national regulation of GHG and air pollutant emissions from major sources — industry, transportation, and consumer and commercial products. The Government has also committed to developing regulations to address indoor air quality.

NRCan worked closely with Environment Canada to finalize the Regulatory Framework for Industrial GHG emissions, consulting with stakeholders including the natural resource industries affected by the new regulations. Under the Clean Air Agenda, NRCan has been tasked with proposing amendments to the *Energy Efficiency Act* to strengthen and broaden the Government's ability to improve the energy performance of equipment and appliances. NRCan also worked extensively with Environment Canada and other stakeholders to consider revisions to Canada's smelting sector in order to reduce sulphur dioxide, particulate and other emissions.

In 2007, the department also launched the suite of ecoENERGY initiatives. Their objectives include reducing the harmful effects of energy production and consumption that accounts for 80 percent of Canada's annual GHG emissions and 85 percent of smog-causing nitrogen oxide emissions, while generating innovative clean energy technologies that Canada can market abroad. NRCan continues to contribute to the federal environmental agenda through three main program areas:

- Energy Efficiency: encouraging Canadians to focus on energy efficiency and conservation — Regulatory measures, such as mandated fuel economy for light duty vehicles and lower power consumption standards for consumer products, will eliminate the most energy-inefficient products from the marketplace. Complementary energy efficiency programs will lead consumers and businesses to even higher efficiency levels through a range of information, tools, training and focussed incentives.
- Renewable Energy: providing financial incentives for emerging renewable energy sources including wind, biomass, hydro, geothermal, solar, ocean energy and biofuels that currently face a cost disadvantage as compared to fossil fuel energy — These technologies will be important components of a cleaner, more diversified energy supply mix.
- Science and Technology: investing in new technologies for clean energy and cleaner supply and use of energy — Long-term reductions in GHG emissions will require sustained research and development (R&D) investment for the development of clean energy technologies. Examples include technologies for clean coal, carbon capture and storage, and reducing the oil sands environmental impact. In addition, light-weight materials are being developed to reduce automobile GHG emissions, and innovative methods are being developed to transform mine waste sites into productive land for growing biofuel crops.

Summary of Performance by Departmental Priority

Smarter, Faster and More Effective Regulation — As the number of new projects continues to grow, there has been increasing pressure on the federal government to improve the performance of the regulatory system for major resource projects.

To respond to the significant growth in the number of resource projects and move forward on commitments to create a more accountable, predictable and timely regulatory review process, the Government has allocated $150 million over five years to establish the Major Projects Management Office (MPMO) within NRCan and to increase the scientific and technical capacity of key regulatory departments. Federal partners include the Canadian Environmental Assessment Agency, the Department of Fisheries and Oceans, Indian and Northern Affairs, Transport Canada, Environment Canada, the National Energy Board, and the Canadian Nuclear Safety Commission.

The MPMO will provide overarching management of the federal regulatory process for major natural resource projects. It will provide a single point of entry into the federal regulatory system for all stakeholders and work with other regulatory departments to identify areas where the consistency, efficiency and effectiveness of the federal regulatory process can be improved. New capacity funding provided through this initiative will ensure that key regulatory departments are positioned to respond to the significant growth in the number of new resource projects and will better enable departments to meet their legal responsibilities for Aboriginal Crown consultation on major resource projects.

This initiative will provide the oversight and capacity needed to address the issues affecting the performance of the federal regulatory system. In short, it will lay the foundation for a more predictable and accountable regulatory system that will improve the competitiveness of Canada's resource industries while ensuring careful consideration of environmental standards and technical requirements. To obtain more information on this horizontal initiative for which NRCan is the lead department, visit http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp.

Enhancing Canada's Forest Sector Competitiveness — Canada's forest sector is undergoing a major transformation as it faces the challenges of a strong Canadian currency, a collapsed U.S. housing market and generally lower commodity prices. At the same time, global competitors are taking advantage of access to cheaper wood, faster growing trees, lower labour costs and lighter regulatory burdens. Under the $122.5-million Forest Industry Long-Term Competitiveness Strategy (FILTCS), NRCan is making significant investments that are leading to the development of innovative technologies and expanded access to new and existing markets.

In 2007-08, an important step in strengthening forest sector innovation and transformation was the continued development of the national forest research institute – FPInnovations. Created through the merger of Paprican, the Forest Engineering Research Institute of Canada, Forintek and the NRCan-created Canadian Wood Fibre Centre and supported by funding from FILTCS, the institute is working to maximize the value of Canada's forest fibre and develop new products and market opportunities. In collaboration with FPInnovations and other forest sector partners, investments under FILTCS are leading to the development of emerging technologies under the Transformative Technologies Program and expanded access to

new and existing markets through innovative programs, such as the Canada Wood Export Program and the Value to Wood Program. More information can be found at http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp.

Mitigating the Impact of the Mountain Pine Beetle Infestation — The devastation inflicted on the forests of British Columbia (B.C.) by the mountain pine beetle is unprecedented. Current and future economic losses to the forest sector are in the billions of dollars, while the possible spread of the infestation threatens the ecological and economic sustainability of Alberta's mountain forests and the greater boreal forest, which stretches from northeastern B.C. to Newfoundland.

NRCan is playing a key role in the implementation of the $200-million Federal Response to the Mountain Pine Beetle Infestation Program. Working closely with provincial counterparts, the department is delivering on a comprehensive, integrated strategy to combat the beetle infestation and its economic, ecological and social impacts. In 2007-08, efforts included surveying and mapping several million hectares of forest; cut-and-burn activities to slow the spread; research to find alternative uses for impacted timber; forest fire fuel reduction activities with Aboriginal and non-Aboriginal communities; and assistance for regional and local economic diversification activities. More information on these initiatives can be found at http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp.

Strengthening Canada's Mining Industry — Over the past year, Canada continued to attract the attention of investors in search of new mineral deposits, maintaining its lead position in worldwide exploration and mineral development-related financing. NRCan contributed to building an attractive investment climate for Canada's minerals and metals sector, while enabling the competitiveness and encouraging the responsibility of our related industries. The 2008 Federal Budget supported the discovery of new, or extensions of, known base metal deposits in Canada by extending eligibility for the Mining Exploration Tax Credit and committing $34 million over the next two years for geological mapping. Led by the department, the Federal, Provincial and Territorial Mines Ministers Conference in 2007 unanimously supported development of a Canada-wide mining research and innovation strategy. To underscore the Government's renewed approach to public-private partnerships in conducting R&D, the 2007 Federal Budget announced the relocation of NRCan's revitalized CANMET Materials Technology Laboratory to McMaster University's Innovation Park in Hamilton, Ontario. In addition, NRCan, working with the province of Nova Scotia, opened up a new opportunity for coal development in Atlantic Canada through the implementation of the *Donkin Coal Block Opportunity Act*.

NRCan not only helped to ensure that the Canadian minerals and mining industry remained globally competitive but simultaneously worked to ensure that corporate responsibility and sustainable development governance were enhanced both in Canada and abroad. For example, in 2007, the Government of Canada announced support for the Extractive Industries Transparency Initiative. This international multi-stakeholder initiative strengthens governance by improving transparency and accountability in the extractives sector. With good governance, revenues generated from natural resources can foster economic

growth and reduce poverty. In addition, progress was made on the Canada-Chile partnership Framework and in Canada's leadership of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development. More information can be found at http://www.nrcan.gc.ca/mms/topi-suje/min_e.htm.

Our Management Priorities

In the context of the challenges and opportunities facing the natural resource sectors and modern public sector management, NRCan is working to become a more integrated, knowledge-based and results-oriented organization. As a priority, the department continues with the implementation of its North Star initiative which includes policy, structural and organizational changes that serve to better position NRCan as an influential science and policy leader, nationally and globally, in the advancement of Government of Canada priorities.

In terms of strengthening the integrity of the corporate management structure, the department developed a natural resources policy framework to allow it to shift from a sectoral approach to a more integrated model where the economic, environmental and social needs of Canadians are paramount. The framework encourages collective leadership, innovative collaboration and information sharing across the department and with stakeholders in pursuit of common goals.

Regarding portfolio coordination, the department has developed — through informal and formal mechanisms such as Memoranda of Understanding and funding arrangements — effective relationships with portfolio entities at the working and leadership levels to ensure policy coherence and support as required. In the meantime, the department is evaluating options and models to better integrate coordination across the full scope of the portfolio.

From a human resources (HR) perspective, NRCan adopted a comprehensive talent management approach supporting the Clerk's public service renewal action plan. This effort included the development of ten specific initiatives to renew the department's workforce and ensure a sustainable, diverse and skilled talent pool. As well, NRCan continued to make progress toward the integration of HR and business planning with the approval of NRCan's first department-wide HR plan.

Among the challenges confronting the department over the next five years, real property represents one of the more urgent priorities. By objective standards, with an average age of 45 years, the inventory of NRCan's diverse asset holdings is considered to be very tired. But the department is well positioned to capitalize on its current strengths and tool kits of solutions to develop an effective real property management framework in support of program and service delivery.

Performance Status by Program Activity and Intermediate Outcomes

The table below presents performance status by program activity and intermediate outcomes based on the core suite of performance indicators presented in the 2007-08 Report on Plans and Priorities. Performance information on these intermediate outcomes can be found in Section II.

Intermediate Outcomes	Key Performance Indicators / Targets	Performance Status
PROGRAM ACTIVITY – EARTH SCIENCES Earth sciences knowledge and tools enable Canadians to achieve economic opportunities, a clean environment, and adapt to a changing climate, in safety and security		
New economic opportunities created for Canadians	Increased mineral and energy exploration investment made by the private sector as a result of public geoscience investments / By 2013-2014, five times the total program sub-sub-activity investment in geoscience Meet the legal requirements to provide a survey system on Canada Lands to enable economic development / By 2008-09 and ongoing: no successful challenges of land tenure on Canada Lands	On track (all)
Reduced stress on the environmental ecosystems and human health	The use of NRCan assessments of environmental hazards that result in corrective actions / By 2007-08, all MERA (mineral and energy resource assessment) requested assessments meet requirements and are completed on time; by 2010-11, 75 percent of promised publications are produced in the first three years of the program Percentage of key Canadian aquifers with complete assessments / By 2010-11, nine aquifers completed	Expectations met (all)
Canadians and their institutions understand and prepare for the effects of a changing climate	The availability of NRCan information to Canadians in developing strategies to adapt to climate change / By 2009-10, agreements are completed with partners who will undertake adaptation and mitigation projects; by 2008-09 and ongoing: agreements are in place to develop the collaboration and tools	On track

Performance Status by Program Activity and Intermediate Outcomes

Intermediate Outcomes	Key Performance Indicators / Targets	Performance Status
Increased safety and security of Canadians	NRCan meets its emergency response obligations in the event of real or simulated civil emergencies / By 2008-09 and ongoing: obligations fully met	Expectations met
	Increased use of NRCan hazard assessments in planning and hazard mitigation decisions / By 2010-11, three revisions with an existing collaborating institution	On track
	Meet international treaty obligations to maintain a well-defined Canada-U.S. boundary for border security purposes / By 2008-09 and ongoing: acceptance of Joint Annual Report	Expectations met
PROGRAM ACTIVITY – ENERGY Canadians benefit economically, environmentally, and socially from the sustainable production, development and use of Canada's abundant energy resources		
Domestic and international energy policy analysis, development and advice that supports sustainable development of Canada's energy sector	Canada's energy contribution to GDP / Maintain current level Canada's energy exports / Maintain current level Canada's emissions intensity / Reduce Canada's emissions intensity	On track (all)
Sustainable development and safe and reliable delivery of electricity with a reduced environmental footprint	Number of petajoules (PJ) of zero or low emission electrical and thermal energy in Canada / Number of petajoules Index of electricity reliability / 99 percent reliability Emissions intensity of electricity generation in Canada / Emissions intensity reduced Public confidence in nuclear fuel cycle activities / Increase in public confidence	On track (all)
A fair, efficient and competitive oil, natural gas and petroleum products marketplace that is consistent with Canada's social and environmental goals	Increased investment in Canada's oil and natural gas industry / Positive trend Increased contributions to GDP from Canada's oil and natural gas industry / Positive trend Increased public awareness and understanding of petroleum markets / Positive feedback; media references	On track (all)

Intermediate Outcomes	Key Performance Indicators / Targets	Performance Status
Improved energy efficiency of all sectors and increased production and use of alternative transportation fuels in Canada	Percent improvements in energy efficiency / Positive trend The number of petajoules energy savings due to energy efficiency / Positive trend Renewable fuel production as a percentage of total transportation fuel / Positive trend Alternative fuel use as a percentage of total transportation fuel / Positive trend	On track (all)
Canadians derive new economic, environmental and social benefits through federal energy S&T	Technology scale-up / Relative number of our projects moving from one category to the next — bench-scale research, pilot-scale research, demonstration, commercialization Technology focussing / Project distribution along the innovation curve Codes published, presentations, active Memorandum of Understanding (MOUs), patents, licences issued / Number of codes published, presentations, active MOU, patents, licences issued Energy S&T partnerships, both domestic and international / Number of partnerships	On track (all)
PROGRAM ACTIVITY – SUSTAINABLE FOREST Healthy forests continue to provide balanced social, environmental and economic benefits to Canadians		
An integrated national forest sector innovation system that addresses current and emerging issues	A national forest research institute, which includes the new NRCan-created Canadian Wood Fibre Centre, is established and defines innovation priorities and goals to improve the competitiveness of the forest sector in Canada / Established by 2007-08 The Canadian Wood Fibre Centre is fully operational and has integrated its priorities with the national forest research institute / Fully operational Academia is actively engaged in the development and launch of a national forest innovation work program / Academia is fully represented by 2012	Expectations met Expectations met On track

Performance Status by Program Activity and Intermediate Outcomes

Intermediate Outcomes	Key Performance Indicators / Targets	Performance Status
Canada's forest industry competes successfully in the global forest products market	Reduction of technical barriers to wood use in offshore, and North American markets / Identify and prioritize existing trade barriers by 2008-09	On track (all)
	Improved competitiveness and productivity of the Canadian secondary-manufacturing wood sector / Constraints and opportunities of global value-added wood markets are identified by 2009	
	Expansion of wood markets in targeted offshore, and North American markets / Increase in wood exports by 10 percent over 5 years ending 2010	
Forest losses are addressed through the provision of balanced social, economic and environmental information and advice	Implementation of the controlling the spread element of the Federal Response to the Mountain Pine Beetle Infestation, including mitigating the eastern spread of the beetle / Full implementation by 2007-08	Expectations met
	Canadian jurisdictions and the value of their contributions coordinating their operational management of forest pest risks under a national forest pest strategy / Number of Canadian jurisdictions	On track
	Canadian jurisdictions and the value of their contributions coordinating their operational management of wildland fire risks under the Canadian Wildland Fire Strategy / Number of Canadian jurisdictions	On track
Canada is a globally-recognized leader of forest sector sustainability	Number of forest countries actively committed to the Canada-led initiative to secure an international agreement on sustainable forest management / 35 countries by 2010	On track
	Value of leveraged contributions in key bilateral science and technology relationships, including the U.S., Russia, and China / A program of technical collaboration is established and implemented with Russia by 2007-08	Expectations met

Intermediate Outcomes	Key Performance Indicators / Targets	Performance Status
Canada's climate change forest reporting obligations are met and forest-based options for adaptation to, and mitigation of, climate change are developed	Information and options for inclusion of forests in adaptation strategies, including options for managing Canada's forest / Completion of analysis and development of options by 2010	On track
	Forest-related information is reported in Canada's National Inventory Report of Greenhouse Gas Sources and Sinks to the U.N. Framework Convention on Climate Change by April of each year / Annual compliance	Expectations met
Forest-dependent communities have choices and options for economic opportunities	Implementation of the protecting forests and communities element of the Federal Response to the Mountain Pine Beetle Infestation, including developing options for new natural resource-based opportunities for affected communities / Full implementation by 2007-08	Expectations met
	Partnerships and their contributions under the Forest Communities Program / 100 community partners by 2009	On track
	Establishment of baseline data on the resilience of Aboriginal and non-Aboriginal forest-based communities / Baseline data developed by end of fiscal 2008-09	On track
PROGRAM ACTIVITY – MINERALS AND METALS Canadians derive sustainable social and economic net benefits from the assessment, development and use of mineral expertise, mineral resources, and related industries		
Investment in Canada's exploration and mining industries is strengthened	Canada accounts for more than 35 percent of the equity raised for mineral exploration and mining in the world / 35 percent or more	Expectations met (all)
	Canada accounts for more than 15 percent of global expenditures on mineral exploration / 15 percent of global expenditures	
	The rate of decline in base-metal reserves is moderated / Stay within 15 percent of current levels	

Performance Status by Program Activity and Intermediate Outcomes

Intermediate Outcomes	Key Performance Indicators / Targets	Performance Status
Market access for mineral and metal commodities (including recyclables) and related industries is promoted and, where necessary, protected;	Unnecessary restrictions on market access and investment are minimized or eliminated / Canada remains among the top five countries in global mineral exploration spending	Expectations met
Canada's international prominence and investment in mining are secured	Canada influences intergovernmental organizations to develop a coordinated program to address the United Nations Commission on Sustainable Development's 2010 agenda for mining sustainability / 100 percent of key international agreements reflect Canadian regulatory and sustainable development approaches	On track
Canadians benefit (i.e., higher quality of life) from R&D with respect to minerals, metals and value-added products	Labor and total factor productivity growth in Canada's minerals and metals industries are greater than the national average for all industries / Greater than the national average for all industries The emission of greenhouse gases and pollutants by the minerals and metals and associated industries (e.g., transportation) are reduced / Reduced emissions by minerals and metals associated industries The health and safety of workers in the mining industry are improved / Fewer work-related mining accidents and deaths	Expectations met
The safety and security of workers and the public throughout Canada are improved with respect to explosives	The number of explosives-related accidents is below or at least comparable to the average of the previous three years / Below or comparable to the average of the previous three years The quantity of explosives stolen is below or at least comparable to the average of the previous three years / Below or comparable to the average of the previous three years	Expectations met (all)

Intermediate Outcomes	Key Performance Indicators / Targets	Performance Status
Canadians are provided with information to improve decisions regarding minerals and metals Regulatory programs meet Government of Canada objectives	Canadians receive relevant, accurate, timely and accessible statistics, as defined in Statistics Canada's Quality Assurance Framework, on the minerals and metals industries / 100 percent compliance The environmental assessments of mining projects under the *Canadian Environmental Assessment Act* are completed within agreed-upon timelines / 80 percent completed within agreed-upon timelines The regulatory process (e.g., the environmental assessment process, and regulatory permitting, licensing and authorization) are streamlined through a single-window approach / Provision of advice The quantity of rough diamonds imported from and exported to non-participants in the Kimberley Process / Nil trade	Expectations met (all)
Policies enhance the productivity and sustainability of the minerals and metals industries	Federal policies are developed in partnership with, and supported by, provincial and territorial mines ministers / High level of collaboration Aboriginals account for five percent of the labor force in Canada's mining industry / Five percent of labor force Aboriginal awareness of the benefits and impacts of mining is enhanced / All requests for information honoured up to level of resources is available	Expectations met (all)

The performance information presented in this report is based on NRCan's 2007-08 results structure which improves our ability to deliver meaningful programs and results for Canada and Canadians.

Strategic Outcome

Canadians derive sustainable social and economic benefits from the assessment, development and use of energy, forest and mineral resources, and have the knowledge to mitigate environmental impacts and respond effectively to natural and man-made hazards

Operating Context

NRCan operates within the context of Canada's vast endowment of natural resources, and a vibrant and growing global market for these resources. Canadians and the world expect that this resource endowment will be explored and developed efficiently and responsibly, with due regard to economic development, social development and environmental integrity. The keys to managing the breadth of the resulting resource-sector opportunities and threats are an authoritative, growing, widely disseminated understanding of the Canadian resource endowment, and world-class expertise in resource-related science and technology.

NRCan views this Canadian natural resource context as three interdependent spheres: our rich natural resource endowment; the people of Canada and their ideas (i.e., their expectations, knowledge, skill and ingenuity); and the public and private sector systems that link people and ideas to resources.

Within this broad resource sector framework, NRCan's activities during 2007-08 were directed toward achieving our strategic outcome. As the departmental results structure evolves, three elements have increasingly come to the fore as a basis for program planning, direction and accountability. These elements are:

- economic development;
- environmental responsibility; and
- safety, security and stewardship.

Economic Development — A fourth consecutive year of strong global economic growth in calendar 2007 sustained the global demand for energy, minerals, metals and forest products. The upward trend in global demand for resources — as measured by price change — continued during 2007-08. As a stable and reliable net exporter of these resources, Canada has been, and will continue to be, in a strong position to realize huge economic gains from this demand.

A cloud over this picture of strong global resource fundamentals was the significant decline in the value of the U.S. dollar — the currency of commodity trade — relative to many other currencies, including the Canadian dollar. With domestic resource development being transacted in Canadian dollars — which are appreciating in value relative to the U.S. dollar — the increase in global resource prices over 2007-08 was less favourable to Canada than it may first appear.

After a slight decline during 2006-07, oil prices returned to the realm of double-digit percentage price increases during 2007-08. This trend continues to present strong opportunities for both western Canadian, and Atlantic offshore petroleum production. High oil prices also continued to drive increases in the demand for the exploration and development of other established, and novel or alternative energy resources in which Canada has a strong position: natural gas, gas hydrates, uranium, hydroelectricity and biofuels. Canadian primary energy consumption increased in 2007 by a substantially smaller amount than GDP indicating improvements in energy efficiency comparable to all Organisation for Economic Co-operation and Development nations.

Metal prices also remained relatively strong over 2007-08; gold prices were a notable exception, yielding double-digit growth. Overall, minerals and metals exploration spending reached record levels in 2007, and even similar levels of spending is indicated for 2008. However, global economic uncertainties may moderate this record growth.

The context for Canada's forest sector is considerably more unsettled. While the value of the global forest products industry continued to grow in calendar 2007, Canada's industry continued to grapple with substantial challenges. These challenges included tough competition from tropical nations practising plantation forestry and operating newer technology forest product mills; a major slowdown in U.S. lumber demand consequent to a deeply troubled housing market; and a ten-year trend of surging raw softwood log exports from Russia to key markets in Asia and Europe. On the other hand, the stable regime for U.S.-Canada trade in softwood lumber that was negotiated in 2006-07 by the Canadian and U.S. federal governments continued to serve the interests of Canada's forest sector during 2007-08. Furthermore, Russia implemented the first phase of a log export tax during 2007-08, which could renew opportunities for Canadian forest products exporters in future years.

The importance of natural resources in the global economy holds tremendous promise for communities close to areas where Canada's resources are located, including Aboriginal and northern communities. Commercial diamond mining in Canada's North – which marked its tenth anniversary in 2007-08 – is a key example of the fulfillment of this promise. However, when these communities have few other economic opportunities, their dependence on resources makes them vulnerable to commodity market downturns, depletion of local reserves, or — in the case of forestry — major disturbances such as pest infestation and fire. Over the past five years, dozens of Canadian forest products mills have closed, and many thousands of forest sector workers have been laid off.

Environmental Responsibility — Understanding and awareness of the environmental footprint of resource exploration and development continue to increase in step with the economic growth that fuels demand for natural resources. This increase is due, in part, to vast improvements in the ease of access to knowledge and information of all types. It is also a consequence of the broadening of horizons that prosperity brings: as a larger share of the world's population has their immediate basic economic needs met, so then do these people seek to improve the long-term sustainability of their economic activity and the amenity value of their surroundings.

Canadians, consumers in key developed-world resource markets such as the U.S. and the European Union, and a growing fraction of the rest of the world expect the Canadian resource sectors — including Canadian firms participating in foreign resource exploration and development — to adhere to, and actively participate in the development and promotion of the highest standards of environmental responsibility. In 2007-08, developed world financial markets saw increasing efforts by institutional investors, investment analysts and, in some jurisdictions, regulators to deepen corporate reporting on social and environmental responsibility. Private sector executives have noted higher societal expectations for corporations to take on a public role, particularly in areas of environmental concern and balancing the growth in natural resource demand with limited supply.

In 2007-08, the biggest single issues of environmental responsibility continued to be climate change and air quality, with intense interest and activity around the December 2007 United Nations Conference on Climate Change in Bali, Indonesia. Scrutiny of the impact on carbon emissions of global petroleum resource development and, for Canada in particular, oil sands development continues to be intense. The role of sustainable forest management in the global carbon balance was given particular attention in Bali, and Canadian forest products exporters have reported industrial consumer concerns in the E.U. that link oil sands development to the sustainable management of the boreal forest. Management of the water resource requirements of oil sands development is also subject to increasing scrutiny.

Environmentally and socially responsible mining practices and processes are also of significant importance to Canada. Concerns are rising around the world regarding water, mine waste management, acid drainage and mine site reclamation. Although the Canadian minerals and metals sector has significantly reduced the environmental impact of its activities over the past two decades, this issue will continue to be one of the most important challenges for the sector in Canada and for Canadian mining companies working abroad.

Turning to environmental change, the very large scale mountain pine beetle (MPB) infestation continued to spread in western Canada during 2007-08, but at a slightly reduced rate. Nevertheless, the projection remains that the substantial majority of lodge pole pine in British Columbia will be killed within the next five years, and concern about the spread of the infestation over the Rockies into Alberta remained intense.

Calendar 2007 was a near-average year for wildland fire in terms of hectares of forest burned.

Safety, Security and Stewardship — Maintaining Canada's Arctic sovereignty is a priority for the Government of Canada, and NRCan has a key role to play in the management of northern and Arctic offshore resources. Arctic access could be eased if the more than 50-year trend of reduced Arctic sea ice is sustained. The extent of Arctic sea ice cover was lower in the summer of 2007 than in any of the previous three years; on the other hand, as of late March 2008, winter Arctic sea ice cover was substantially greater than in any of the previous three years, although this increase represents relatively thin, first-year ice.

International interest in the circumpolar region continued to grow in 2007-08. This

included a demonstration of Russia's interest in the form of the widely publicized Arktika 2007 visit to the North Pole seabed in August of 2007. The Danish *LOMROG 2007* expedition also conducted surveys to delineate the Arctic seabed north of Greenland in August and September of 2007.

Other than the MPB infestation, the number and impact of natural disasters in Canada in 2007-08 were fortunately within historical norms. Similarly, current and legacy hazards due to resource exploration and development did not change significantly in 2007-08.

Earth Sciences Program Activity
(Includes the Earth Sciences - Geomatics Canada Revolving Fund)

Earth sciences knowledge and tools enable Canadians to achieve economic opportunities, a clean environment, and adapt to a changing climate, in safety and security

Planned Spending / FTEs	Actual Spending / FTEs
$233.8M / 1,582	$251.6M / 1,531

New economic opportunities created for Canadians
Actual Spending: $196.9M

Canadians and their institutions understand and prepare for the effects of a changing climate
Actual Spending: $13.2M

NRCan Priorities:
- Clean Air for all Canadians
- Strengthening Canada`s Mining Industry

Government of Canada Outcome:
- A Clean and Healthy Environment
- Strong Economic Growth

Reduced stress on the environmental ecosystems and human health
Actual Spending: $18.4M

Increased safety and security of Canadians
Actual Spending: $23.1M

The Earth Sciences Program Activity provides the essential component of the science and technology (S&T) that Canadians need to make informed economic, social and environmental decisions. Geomatics Canada, Canada's national mapping agency, provides geographic information on Canada's landmass and offshore including topographic maps, legal surveys of Canada Lands, geodesy for accurate positioning, and the reception and archiving of earth observation data. The Geological Survey of Canada, Canada's national geoscience agency, works with the provinces and territories to provide the geological information that ensures a competitive investment climate for mineral and petroleum exploration, elucidates grouzzndwater resources, maps the geology of the seafloor, helps reduce the risk posed by natural hazards such as earthquakes, magnetic storms, landslides, and naturally-occurring toxic substances. The Earth Sciences Program Activity also manages horizontal programs in

climate change impacts and adaptation, and GeoConnections; delivers on Canada's commitment to monitoring nuclear explosions under the Comprehensive Nuclear Test Ban Treaty; responds to nuclear emergencies; and provides logistics support to Arctic science through the Polar Continental Shelf Project.

Key Achievements

New economic opportunities created for Canadians — Economic opportunities often develop from the release of public-good information, such as that provided by NRCan, which is required to understand the investment risk associated with assessing, managing, regulating and monitoring potential environmental impacts of exploration, development and transportation of mineral, oil and gas resources. Exploration for unconventional sources of energy, such as coal bed methane and gas hydrates, and the development of these potential resources are necessary for a secure supply of energy. In addition, the department's S&T provides the science basis for an environmentally responsible and sustainable framework for the extraction and use of these natural resources. Economic opportunities also arise from having a robust, reliable system of legal surveys for those lands for which the Crown has responsibility. All related programs are on track to meet expected results. More information on these programs and on the following key achievements can be found at http://ess.nrcan.gc.ca/pri/eo_e.php.

The department's Targeted Geoscience Program (TGI-3) supports existing base metal mining communities by generating and disseminating geoscience knowledge to increase the likelihood of the discovery of new base-metal deposits or extensions of known deposits. Companies are applying the new TGI-3 geoscience knowledge to their exploration strategies, and are proactively seeking to share their new data, and to collaborate in its interpretation of the data with TGI-3. Partnerships with the provincial geological agencies have been a key to TGI-3's success.

Geoscience knowledge created by the NRCan Beaufort-Mackenzie Project has contributed to new exploration investments in the Beaufort Sea. Industry active in the region had access to this knowledge and Imperial Oil and ExxonMobil applied it in their geological analysis of the area, and successfully bidding $585 million for an exploration licence for a 205,000 hectare parcel in the Beaufort Sea. This investment represents a 10-fold increase in the value over bids in previous years.

In the Mackenzie Valley, new geoscience information created and published by NRCan's Mackenzie Corridor Project contributed to increased exploration investment in the region and to the successful discovery of the Summit Creek Play by Northrock Resources and Husky Oil. NRCan's regional geological expertise has led to further interest of companies active in the region. For example, MGM Resources, Devon and Kodiak Resources have sought the regional expertise of NRCan's geoscientists prior to undertaking new field work and drilling programs.

In eastern Canada, the release of NRCan geoscience data and interpretations contributed to a dramatic increase in the level of petroleum exploration. In Québec, new exploration permits generated over $1 million in revenue for the province, along with an increase of private sector investment from $2-3 million to approximately $10 million last year (the projected increase for 2008-09 will be nearly $20 million). Similar increases have

been reported in New Brunswick, including $50 million a year over several years in drilling and supporting services around Sussex, and new multi-million dollar drilling and seismic surveys in Newfoundland.

On the east coast, geoscience information provided by NRCan, such as the interpretation of geological structures, is being used by industry to prepare assessments leading to investment decisions. In addition, this new geoscience information has been made available to the Canada-Newfoundland and Labrador Offshore Petroleum Board (CNLOPB) in order to assist in the Board's own assessments of offshore resources, contributing to enhanced management of these resources.

New geoscience knowledge has created an improved understanding of seafloor stability off the coast of Labrador, a critical factor in ensuring safe exploratory drilling. The first state-of-the-art seabed information to be collected in more than thirty years — accomplished through collaboration with industry, universities and the provinces — has been made available in the public domain. This data are of critical importance to a recently launched environmental assessment by the CNLOPB off the Labrador Shelf prior to the leasing of lands for exploration in 2008.

NRCan provided geoscience expertise to the Joint Review Panel (Mackenzie Valley environmental assessment review panel) on sixteen issues that were reviewed in regard to the Mackenzie Valley pipeline. The department's contribution to the impact of the work of the Mackenzie Valley Environmental Assessment project has been cited as an example of the importance of NRCan's role as a provider of an independent, neutral and balanced perspective supporting decisions of national importance and scope.

NRCan is investigating the potential of gas hydrates, an ice-like substance to provide a new source of clean-burning natural gas under its Gas Hydrates Program. Based on sparse preliminary data, the Canadian Arctic is believed to hold vast but unproven quantities of gas hydrates that could exceed all current conventional gas reserves. In March 2008, a collaborative effort with researchers from the Japan Oil, Gas and Metals National Corporation and Northwest Territories' Aurora Research Institute at the Mallik site in the Mackenzie Delta was successful in achieving the

DID YOU KNOW?

Hydrocarbon exploration and development and commercial fishing are two key sectors of Canada's maritime economy. NRCan continues to contribute to hydrocarbon-related activities and, in addition, has contributed to improved fishing management through the provision of new seabed mapping data that has been incorporated into marine management plans. This information has contributed to the voluntary closure of certain fishing areas for the conservation of stocks, which in turn will lead to a stronger resource within a sustainable ocean management framework. Adoption of NRCan seabed maps by the fishing industry increased cost-effectiveness and led to the reduction of the environmental impacts from dredging and dragging. This work has been recognized by a 2008 Excellence in Technology Transfer Award by the Federal Partners in Technology Transfer.

first sustained production of natural gas from solid hydrates by depressurization.

NRCan's United Nations Convention on the Law of the Sea (UNCLOS) Program has been designed to produce a scientifically sound and defensible claim to support Canada's sovereign rights on resources on or below the seabed in the Atlantic and Arctic continental margins, beyond the current 200 nautical mile-exclusive economic zone. The survey program has been developed in collaboration with the Department of Foreign Affairs and International Trade and the Department of Fisheries and Oceans to maximize the area of Canada's claim and contribute to its successful acceptance.

In 2007-08, several UNCLOS-related surveys were undertaken, including one in conjunction with Sweden and Denmark, using a Russian nuclear icebreaker under contract. In some of areas, severe ice conditions and the extreme lack of visibility made it impossible to collect data emphasizing the fact that, although substantial progress is being made, the environmental challenges NRCan faces are considerable. More information on UNCLOS can be found at http://ess.nrcan.gc.ca/pri/nat_e.php#cs.

Secure land tenure is achieved through properly demarcated boundaries and the clear ownership of property rights as recorded in the Canada Lands Surveys System (CLSS) and the land registration systems it supports. This year's results in connection with various comprehensive land claims programs in the North are as follows. In the Yukon: for the Kluane First Nation, 18 parcels were surveyed bringing 75 percent of the claim to completion; and for the Kwanlin Dun First Nation 33 parcels were surveyed, bringing 65 percent of the claim to completion. For the Carcross/Tagish First Nation, 43 parcels were surveyed bringing 35 percent of the claim to completion. In the Northwest Territories for the Tlicho First Nation, 15 parcels were surveyed representing 4.8 million acres of land, bringing 50 percent of the Tlicho land claim to completion.

In southern Canada, 103 survey projects were completed to support First Nations self-government initiatives and specific land claims. This work included support for the transfer of 159,000 acres of land to First Nations in Manitoba and 41,000 acres in Saskatchewan. In addition, the CLSS On-Line was introduced to increase efficiency of the property rights system. All of these activities support capacity development in Aboriginal communities and sustainable economic development. More information on this program can be found at http://ess.nrcan.gc.ca/pri/eo_e.php.

Reduced stress on the environmental ecosystems and human health — The Minister of NRCan is responsible, under the *Canadian Environmental Protection Act* and the *Canadian Environmental Assessment Act*, for fostering the sustainable development of Canada's natural resources through the provision of geoscience expertise and advice. Program expectations over the reporting period have been met.

Through departmental programs such as the Environment and Health Program, the Mapping Groundwater Program, and the Legislated Environmental and Resource Assessment Service, NRCan provides key information and expertise for effective decision-making. For 2007-08, key achievements include the completed assessments of nine Canadian aquifers, with three more assessments underway.

Geoscience expertise was provided in 56 projects undergoing federal environmental assessments (i.e., Mackenzie Gas Project, Kemess North in B.C., White Point Quarry and Marine Terminal in Nova Scotia, and the Victor Diamond Mine in Ontario). More information can be found at http://ess.nrcan.gc.ca/pri/cl_e.php.

Canadians and their institutions understand and prepare for the effects of a changing climate — Faced with the impacts of a changing climate, Canadians need to understand, prepare for and adapt to the anticipated environmental, economic and societal effects on their communities, infrastructure and way of life. This Government of Canada priority is one of eight themes of the Clean Air Agenda. The department generates and publicizes earth sciences data and information aimed at improving the assessment of the vulnerability, and response, of Canada's landmass and coastal areas to the effects of a changing climate.

NRCan's Enhancing Resilience to a Changing Climate and the Climate Change Impacts and Adaptation programs are on track to make information available and to develop and implement mechanisms for collaboration between different levels of government, private sector entities and community organizations on complex adaptation issues. More information can be found at http://ess.nrcan.gc.ca/pri/cc_e.php and http://adaptation.nrcan.gc.ca/index_e.php.

Increased safety and security of Canadians — NRCan provides information aimed at reducing the risks to Canadians from natural hazards by understanding and monitoring the actual and probable occurrences of earthquakes, geomagnetic storms, tsunamis, volcanoes and landslides, leading to the identification of risk mitigation options. In addition, in the event of a civil emergency, the department provides geographical and satellite information to a wide range of clients. All related programs are either on track or have met expectations.

Through NRCan's Reducing Risks from Natural Hazards Program, the department developed a seismic model that provides information on expected ground shaking from earthquakes at a given location in Canada. The model will form the basis of seismic design regulations of the National Building Code of Canada.

NRCan's security-related activities include cooperation with the United States government on maintaining the international boundary line and vista. More information can be found at http://ess.nrcan.gc.ca/pri./pub_e.php.

DID YOU KNOW?

NRCan participated in a civil emergency exercise involving other government departments and some portfolio agencies. As well, lessons learned from two in-house civil emergency tabletop exercises are used to further enhance our capability to respond to any potential future civil emergency within our mandate.

Energy Program Activity

Canadians benefit economically, environmentally, and socially from the sustainable production, development and use of Canada's abundant energy resources

Planned Spending / FTEs
$1,593.9M / 1,141

Actual Program Spending / FTEs
$2,807.1M* / 1,252
(Includes Statutory Payments $2,388M*)

Domestic and international energy policy analysis, development and advice that supports the sustainable development of Canada's energy sector

Actual Spending: $8.3M

A fair, efficient and competitive oil, natural gas and petroleum products marketplace that is consistent with Canada's social and environmental goals

Actual Spending: $163.0M

NRCan Priorities:
- Clean Air for all Canadians
- Smarter, Faster and More Effective Regulation

Government of Canada Outcome:
- A Clean and Healthy Environment
- Strong Economic Growth

Sustainable development and safe and reliable delivery of electricity with a reduced environmental footprint

Actual Program Spending: $89.3M
Statutory Payments: $2,388M*

Improved energy efficiency of all sectors and increased production and use of alternative transportation fuels in Canada

Actual Spending: $61.1M

Canadians derive new economic, environmental and social benefits through federal energy S&T

Actual Spending: $117.4M

* Statutory payments for Atlantic Offshore – these expenditures were largely offset by oil and gas royalty revenues received during the year ($1.7 billion). Pursuant to the Atlantic Offshore Accords, NRCan receives the federal royalty revenues related to the offshore – which were greater than planned due to significant increases in oil prices and production – and subsequently makes payments to the provinces equivalent to the royalty revenues received. Refer to page 72 for more information on revenues.

The Energy Program Activity fosters the sustainable development and responsible use of Canada's energy resources to meet the present and future needs of Canadians. It focuses on an integrated package of S&T, policies, programs, knowledge and international activities in the areas of energy efficiency (residential, commercial, industrial, transportation), renewable energy, electricity, bioenergy, nuclear energy, alternative transportation fuels and the production of conventional and unconventional fossil fuels to further sustainable development. Through its work, the program helps address the environmental impacts associated with energy production and use; promotes better environmental and consumer choices; develops and demonstrates new technology solutions; facilitates North

American and international trade in energy; contributes to technical innovation, job creation and economic growth; facilitates environmental protection and increased public safety and security; and helps to ensure competitively priced, reliable and secure energy supplies for Canadians.

Key Achievements

Domestic and international energy policy analysis, development and advice that support sustainable development of Canada's energy sector — Energy is a major pillar of the Canadian economy, representing 7.2 percent of our GDP in 2006. The energy sector provides over 270,000 well-paying skilled jobs in Canada. At the 2007 Council of Energy Ministers' meeting, federal, provincial and territorial ministers worked to continue this growth through increased intergovernmental cooperation in advancing regulatory efficiency, collaboration on the development of new energy technologies, and improving energy efficiency.

NRCan also worked closely with DFAIT to advance the climate change, clean energy and energy efficiency aspects of the G8 Summit in Heiligendamm, Germany, as well as the follow-up to the Gleneagles Plan of Action on climate change and clean energy. In November 2007, Canada hosted the G8-International Energy Agency-Carbon Sequestration Leadership Forum workshop in Calgary, where NRCan was instrumental in developing the recommendations to G8 Leaders for early opportunities in carbon capture and sequestration. NRCan's policy analysis and technical expertise in energy, forestry and climate change adaptation anchors the Government of Canada's Kyoto implementation and post-2012 negotiations in bilateral and multilateral climate change fora, including the United Nations Framework Convention on Climate Change (UNFCCC), the U.S.-led Major Emitters Process, the G8 and Asia-Pacific Economic Cooperation. The department plays a leadership role in the

DID YOU KNOW?

Although air emissions from energy have increased with economic growth, progress is being made. For instance, Canada's emissions intensity, expressed as carbon dioxide emissions from fuel combustion per unit of GDP, have declined by 21.6 percent between 1990 and 2006 (the latest year for which data are available). NRCan played a critical role in supporting the Government in the development and implementation of the Clean Air Agenda. In 2007-08, NRCan worked closely with Environment Canada (EC) to finalize the Regulatory Framework for Industrial Greenhouse Gas Emissions and to develop the Horizontal Management, Accountability and Reporting Framework for the effective inter-departmental management of climate change and clean air programming.

UNFCCC's Experts Group on Technology Transfer.

Internationally, Canada stands out as one of the world's key energy suppliers with exports totalling over $86 billion in 2006. Canada strengthened its key energy relationship with the U.S., particularly through the North American Energy Working Group. The Trilateral Agreement for Cooperation in Energy Science and Technology, signed in July 2007 in Montebello, provides a formal framework for mutually beneficial research, development and deployment of energy technologies. NRCan's energy trade position was strengthened through a Nova Scotia-Chinese workshop on energy and the creation of a Canada-European Union energy dialogue initiated by leaders. More generally, Canada worked through the International Energy Agency to promote open and transparent markets and the diversity of global energy supply.

Sustainable development and safe and reliable delivery of electricity with a reduced environmental footprint — In January 2007, Prime Minister Harper announced more than $1.5 billion in funding for the ecoENERGY Renewable Power and ecoENERGY for Renewable Heat initiatives to boost Canada's renewable energy supplies.

Following the extended shutdown of the NRU reactor in Chalk River, Ontario, in November 2007, and in the face of a worldwide shortage of isotopes directly or indirectly vital to the continued health of people around the world, the government introduced and passed emergency legislation to return the NRU back into service. The opinion of experts was that the risk of operating the NRU reactor was minimal in comparison to the risk of not restarting it. The reactor returned to service on December 16, 2007 and the much-needed isotopes were made available to health care facilities during the week of

DID YOU KNOW?

As of March 31, 2008, the ecoENERGY for Renewable Power program has registered 187 projects for a total capacity of approximately 11,700 MW. NRCan has signed 12 contribution agreements for 948 MW of capacity and committed $305 million over 10 years. It is estimated that by 2011, this program will result in the production of 14.3 terawatt hours (or 51.5 petajoules) of electricity per year of new, low-impact renewable power along with reductions in GHG emissions and critical air contaminants. As for the ecoENERGY for Renewable Heat program, it has received 323 applications and signed over 200 contribution agreements worth about $6 million. An additional 13 projects have been selected for pilot projects for residential solar water heating, and contribution agreements with each of them are underway. It is estimated that by 2011, this program will result in the installation of 700 solar thermal units in the industrial/commercial/institutional sector and thousands of units in the residential sector which have the potential energy savings of 0.35 petajoules and significant reductions in GHG emissions and critical air contaminants (www.ecoaction.gc.ca). Program delivery is on track to meet these targets.

December 23, 2007. On February 4, 2008, Atomic Energy Canada Limited (AECL) announced the completion of the installation of a second seismically qualified motor connected to an emergency power back-up system. The NRU reactor is now operating at the highest level of safety during its fifty years of operation.

NRCan fully supports nuclear power as part of the Canadian energy mix as a stable source of baseload generation with minimal climate change impacts. To this end, a number of achievements have been made over the past year. In November 2007, Canada officially announced that it would join the Global Nuclear Energy Partnership which promotes a safer, more secure and cleaner world through the responsible development of nuclear energy for peaceful purposes. The department also announced that it would conduct a full review of the structure of AECL to allow the Government of Canada to set a clear, long-term strategic direction for AECL. More information can be found at http://www.nrcan-rncan.gc.ca/media/newcom/2007/2007122-eng.php.

Over the course of the past year, NRCan moved forward on two important nuclear policy issues: the introduction of Bill C-5 on the proposed *Nuclear Liability and Compensation Act* and the Government of Canada's decision on the approach for the long-term management of nuclear fuel waste. More information can be found at http://www.nrcan-rncan.gc.ca/media/newcom/2007/200750-eng.php.

As well, NRCan has continued progress on radioactive waste cleanup and decommissioning programs including the Nuclear Legacy Liabilities Program, historic wastes and the cleanup of Cold War-era uranium mines. In the second year of the program, key milestones include the completion of construction and the operation of a waste analysis facility at the Chalk River laboratory.

A fair, efficient and competitive oil, natural gas and petroleum products marketplace that is consistent with Canada's social and environmental goals — The Canadian oil and gas extraction industries continue to deliver strong economic benefits for Canada, accounting for 3.5 percent of GDP in 2007. Capital spending of $53 billion has nearly doubled since 2000 while industry exports have increased from $40 to $70 billion over the same period.

Increased investment in Canadian natural gas exploration and development remains strong, with natural gas drilling at 12,600 wells

DID YOU KNOW?

An internal evaluation of the Phase I Port Hope Area Initiative found that the Low-Level Radioactive Waste Management Office completed the expected technical studies, preliminary environmental assessments and negotiation of municipal administrative costs in a manner that was considered cost-effective. The evaluation recommended that the Office produce a framework to clearly define its roles and responsibilities and those of other government departments. More information on this evaluation can be found at: http://www.nrcan.gc.ca/dmo/aeb/aeb-rpts-2007-EV0703-e.htm.

in 2007 compared to 9,000 wells in 2000. In Atlantic Canada, the Canaport liquefied natural gas project and the associated Emera Brunswick pipeline are both under construction. Energy producers and pipeline companies are also considering major energy investments in the North via the Mackenzie Gas Project. There has been an increase of participation in regulatory hearings as the public becomes more knowledgeable and engaged about energy projects.

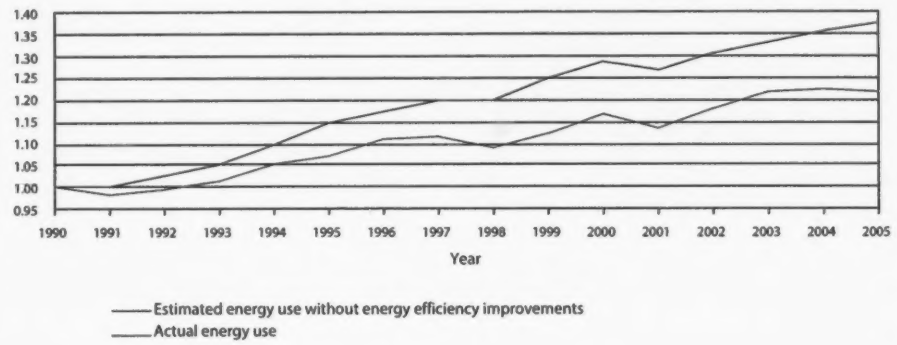
NRCan continued to provide timely and accurate information to the federal government, industry and the public concerning the development of crude oil, natural gas and refined petroleum products. In particular, the department published an annual outlook for updates for the natural gas industry, monthly oil market analyses and posts daily prices for crude oil, gasoline and other petroleum products, as well as the Fuel Focus publication on a biweekly basis. More information can be found at http://www.ngas.nrcan.gc.ca and http://www.fuelfocus.nrcan.gc.ca/index_e.cfm.

Canada now produces over one million barrels of oil each day from the oil sands. This rate of output could very well triple within the next ten years. While the development of Alberta's oil sands undoubtedly provides an economic stimulus to western Canada and to Canada as a whole, it also gives rise to important social, environmental and economic issues. The government's response to the report of the Standing Committee on Oil Sands can be found at http://cmte.parl.gc.ca/Content/HOC/committee/391/rnnr/reports/rp2614277/rnnrrp04/rnnr04-e.pdf.

With respect to energy infrastructure vulnerability assessments, the department updated the Canada-U.S. common methodology visit template and carried out five bi-national assessments. The department also provided expert advice to facility owners and Public Safety Canada to enhance the protection of critical infrastructure. Moreover, it reviewed the U.S.-Canada Power Outage Task Force final report on the implementation of the task force recommendations (September 2006) and monitored ongoing follow-up actions.

Improved energy efficiency of all sectors and increased production and use of alternative transportation fuels in Canada — Canadians spent about $152 billion in 2005 (latest year for which data are available) on energy to heat and cool their homes and buildings and to operate their appliances, vehicles and industrial processes. This amount represents 14.2 percent of the country's GDP. From 1990 to 2005, Canada's overall energy efficiency improved by an estimated 15.8 percent or 1096 petajoules. The change in energy use between 1990 and 2005, actual and without energy-efficiency improvements, is shown in the graph below. The difference in energy use due to energy efficiency — the estimated energy saving — represents a reduction in energy costs of $20.1 billion in 2005 and a reduction in GHG emissions of almost 64 megatonnes (Data source: Energy Efficiency Trends Analysis Tables at http://oee.nrcan.gc.ca/statistics).

Figure 1-2 Secondary Energy Use, Actual and Without Energy Efficiency Improvements, 1990 to 2005



The graph demonstrates a positive trend in energy-efficiency improvements, which is the target against which performance is measured. Moreover, renewable fuel production as a percentage of total transportation fuel and alternative fuel use as a percentage of total transportation fuel are both increasing in Canada. Our programs contribute to this positive trend. Detailed information on energy-efficiency program performance can be found in the Report to Parliament at http://oee.nrcan.gc.ca/parliament06-07. As well, more information about grants and contributions related to this program can be found at http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp.

In 2007-08, the government announced a suite of initiatives on clean energy under the banner of ecoENERGY and the program delivery is on track. These include regulatory activities and measures to encourage and assist Canadians to improve their energy use in all of the major end-use sectors: housing, buildings, equipment, industry, transportation, and renewable fuels (ethanol, biodiesel). Some of the key achievements under the ecoENERGY initiative include:

- ecoENERGY for Buildings and Homes — NRCan issued more than 6,600 labels for new houses and 102,800 for existing houses. Five provinces have active projects related to increasing the stringency of the Model National Energy Code of Canada for Buildings. In addition, six provinces have announced changes to building codes to achieve an energy efficiency rating of 80 on NRCan's EnerGuide Rating System.
- ecoENERGY Retrofit —102,800 homes had pre-retrofit energy evaluations and 17,000 homeowners received grants averaging approximately $1,000 each. All regions of Canada, except one province and one territory, have matching programs that provide homeowners with seamless access to both orders of government support for home retrofits. In addition, 96 retrofit projects were funded in small and medium organizations with under 500 employees or less than 10,000 square metres.

DID YOU KNOW?

Key achievements during 2007-08 related to regulatory processes include:

- The Major Projects Management Office (MPMO) was established within NRCan to provide a single point of entry into the federal regulatory system for all stakeholders and to provide overarching management of the federal regulatory process for major natural resource projects. The creation of the MPMO has laid the foundation for a more predictable and accountable regulatory system that will improve the competitiveness of Canada's resource industries while ensuring careful consideration of environmental standards and technical requirements.
- The Frontier and Offshore Regulatory Renewal Initiative has emerged as the chief vehicle for intergovernmental dialogue on frontier and offshore oil and gas regulatory policy and achieved substantial progress since its inception. The new Drilling and Production Regulations were drafted to make them goal-oriented and consultations with stakeholders have been undertaken.
- Amendments to the *Canada Oil and Gas Operations Act* received Royal Assent in December 2007. These authorize the National Energy Board to oversee the economic regulation of pipelines and related infrastructure in Canada's frontier.
- The Deep Panuke project was the first offshore project to be reviewed in the context of the February 2005 Atlantic Energy Roundtable Memorandum of Understanding on effective, coordinated and concurrent environmental assessment and regulatory processes. The timeline for the review was significantly shorter than past offshore oil and gas projects in Canada and was comparable to other international jurisdictions.

More information on ecoENERGY programs and achievements can be found at http://www.ecoaction.gc.ca/ecoenergy-ecoenergie or http://oee.nrcan.gc.ca.

Canadians derive new economic, environmental and social benefits through federal energy S&T — NRCan is advancing the Government of Canada's priorities of a clean and healthy environment and strong economic growth through strategic partnerships that increase Canada's energy S&T knowledge. NRCan is on track with the delivery of programs that support the development of cleaner and more efficient technologies, products and industrial processes, as well as encouraging deployment in new domestic and foreign markets.

NRCan's energy S&T is accelerating the development and market readiness of technology solutions in clean energy activities through public-private partnerships. NRCan's efforts to develop and demonstrate

DID YOU KNOW?

Since 1982, NRCan has been partnering with Iogen, an Ottawa-based manufacturer of industrial enzymes and a leading developer of technology, to produce fuel ethanol from cellulosic biomass. This is important because the department estimates that ethanol produced using Iogen's technology could deliver about twice the GHG reductions compared to conventional grain-based ethanol. Using waste biomass feedstocks has the potential life-cycle GHG emissions reductions of 80 percent compared to gasoline, with the added advantage of a lower-cost feedstock than grain. These energy R&D efforts over the past 25 years have resulted in Iogen recently announcing that it expects to soon construct the country's first full-scale cellulosic ethanol fuel facility producing an estimated 70 million litres per year.

new leading-edge technologies are helping mobilize the competitive nature and creativity of entrepreneurs, and industry partnerships are strengthening our standing in the international community — all leading to an increase in the export of innovative energy technologies. For example, NRCan co-developed the environmentally advanced EcoChill refrigeration and heat recovery system. A recent installation at a multi-sport complex in Fort Saskatchewan, Alberta is saving 2,000,000 kWh per year of natural gas, reducing GHG emissions by 353 tonnes of carbon dioxide equivalent per year and recovering 85 percent of the refrigeration system's rejected heat which is then reused to heat the building and water. The system was also selected to be used at the 2010 Vancouver Olympic Games in all ice and curling rinks, as well as the oval speed skating facilities where heating and refrigeration are required.

The department was instrumental in the establishment of the International Electrotechnical Commission (IEC) Technical Committee 114 on Marine Energy. NRCan is the chair of this 15-member committee to develop nation-wide standards. In addition, NRCan and the Standards Council of Canada established a mirror committee that provides advice on the IEC standards development process to ensure that the international standards properly reflect the development needs of a rapidly growing marine energy industry in Canada.

Over the past year, significant progress was made advancing technologies along the innovation curve. For instance, 15 percent of projects moved from one stage to another, from bench-scale research to pilot-scale and from pilot- to full-scale demonstration. The distribution of energy S&T projects is now 21 percent basic research, 56 percent bench-scale, 14 percent pilot-scale and 9 percent demonstration, reflecting a balanced program. This suite of projects encompasses collaboration with more than a thousand national and international partners. Energy

DID YOU KNOW?

Clean coal technologies have the potential to dramatically reduce air emissions. NRCan is actively conducting research on such innovative technologies, in particular, new zero-emission oxy-fuel combustion processes which combined with carbon capture, offers a means of burning fossil fuels with almost zero emissions. Many of these technologies are being developed by NRCan laboratories in collaboration with utilities and leading-edge researchers in universities and the private sector, to provide the knowledge and technologies for a new generation of cleaner coal-fired power plants. Carbon sequestration work in Saskatchewan's Weyburn-Midale — an international university-government-industry project — has demonstrated the safe disposal of carbon dioxide in geological formations and is leading to a best-practice manual on the subject.

S&T continued to show strong results in numbers of codes published (34), active Memoranda of Understanding (69), active patents (52), issued licenses (21) and patents (42). These indicators illustrate a continued strong and diverse S&T performance that addresses key departmental and Government of Canada priorities.

More information on energy S&T programs can be found at http://www.nrcan.gc.ca/com/eneene/science-eng.php.

Sustainable Forest Program Activity

Healthy forests continue to provide balanced social, environmental and economic benefits to Canadians

Planned Spending / FTEs
$268.3M / 973

Actual Spending / FTEs
$206.7M / 892

An integrated national forest sector innovation system that addresses current and emerging issues

Actual Spending: $50.7M

Canada's climate change forest reporting obligations are met, and forest-based options for adaptation to, and mitigation of, climate change are developed

Actual Spending: $13.4M

Canada is a globally-recognized leader of forest sector sustainability

Actual Spending: $6.8M

Forest losses are addressed through the provision of balanced social, economic and environmental information and advice

Actual Spending: $41.2M

NRCan Priorities:
- Enhancing Canada's Forest Sector Competitiveness
- Mitigating the Impact of the Mountain Pine Beetle

Government of Canada Outcome:
- Strong Economic Growth

Forest-dependent communities have choices and options for economic opportunities

Actual Spending: $11.5M

Canada's forest industry competes successfully in the global forest products market

Actual Spending: $83.1M

The Sustainable Forest Program Activity promotes the sustainable development of Canada's forests for the social, environmental and economic well-being of present and future generations of Canadians. As the national science-based forest policy organization in Canada, this program activity plays a pivotal role in leading real change and results for a healthy forest and a strong forest sector by building consensus on key forest issues; shaping national and international forest policy agendas in response to forest-related international commitments and obligations; promoting the competitiveness of Canada's forest sector; generating, assembling

and disseminating forest S&T and policy information; and in developing, implementing and transferring sustainable forest management knowledge, products, strategies and technologies to Canadians and to interested nations around the world.

Key Achievements

An integrated national forest sector innovation system that addresses current and emerging issues — The long-term competitiveness of the Canadian forest sector is dependent upon the ability of all of its stakeholders to develop the integrated national innovation system that is required to enable the innovation that is key to forest sector transformation. While still in the early stages of implementation, program delivery in this area is on track and meeting expectations.

In 2007-08, NRCan continued to support the development of the recently-merged national forest research institute, FPInnovations, which comprises four divisions — Paprican, FERIC, Forintek and the NRCan-created Canadian Wood Fibre Centre (CWFC). With funding support from the Forest Industry Long-Term Competitiveness Strategy (FILTCS), this merger has created the world's largest forest research institute whose primary objective is to maximize the value of Canada's forest fibre and develop new products and market opportunities. More information on key accomplishments related to FPInnovations and the CWFC can be found at http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp.

NRCan is also working closely with provincial and territorial partners, industry and academia to achieve progress on a national forest innovation system. In collaboration with the Canadian Council of Forest Ministers' (CCFM) Innovation Working Group, significant work was completed on a forest sector innovation framework to develop and strengthen partnerships and lead to greater collaboration between government, industry, universities and granting councils on desired forest sector outcomes. Also under the auspices of the CCFM, NRCan is playing a key role in the development of Canada's next forest strategy which focuses on forest sector transformation and mitigation and adaptation to climate change. More information can be found at http://www.ccfm.org.

Canada's forest industry competes successfully in the global forest products market — NRCan is on track with the delivery of programs to improve industry operational efficiencies and reduce costs; find new end uses for forest products and new markets in growth areas; address the technical barriers that can limit trade in new and traditional markets; and streamline the domestic policy and regulatory environment to support competitiveness while maintaining environmental and social values deemed important to Canadians.

NRCan is making significant investments that are leading to the development of innovative technologies and expanded access to new and existing markets. Under FILTCS, NRCan is promoting forest sector innovation and investment. For example, the recently established Transformative Technologies Program is leading to the development and adaptation of emerging breakthrough technologies. FILTCS is also providing investments aimed at expanding market access for Canada's forest products through programs such as the Canada Wood Export Program, the North America Wood First Initiative and the Value to Wood Program.

DID YOU KNOW?

An internal evaluation of the Value to Wood Program (VWP) (2002-07) demonstrated that the research component has been successful in facilitating value-added product opportunities through mid-stage generic research, and that it has also developed improved processes that have contributed to increased quality, productivity and reduced costs. A key impact of the program has been on the finger-jointing and I-joist manufacturing sector where, through economic forecasting techniques, benefits were estimated to be around $10 million annually. It is noted that the mechanisms for transferring research results to the smaller value-added firms and engagement with smaller companies in general, have been limited. The evaluation recommends that mechanisms be put in place to better monitor the impacts of the VWP, including improved monitoring of costs and benefits. More details on this evaluation can be found at http://www.nrcan.gc.ca/dmo/aeb/aeb-rpts-2007-EV0701-e.htm.

Moreover, an evaluation of the Canada Wood Export Program (CWEP) (2002-07) found that the program has had a positive impact in coordinating the industry's efforts in addressing market access issues such as the international acceptance of wood products in offshore markets. The program promoted cooperation and coordination among key forest sector stakeholders and appeared to increase the level and cost-effectiveness of private sector marketing activities. CWEP also influenced building code development in several key markets and the program's market access activities appear poised to make a significant impact in the near future. The evaluation recommended improvements to the current project and performance monitoring practices. It is also noted that CWEP should invest more in market development for product sub-sectors not well represented in offshore markets and that it should take steps to better respond to the needs of the wood manufacturing sector in the context of the North American market. More details on this evaluation can be found at http://www.nrcan.gc.ca/dmo/aeb/aeb-rpts-2007-EV0704-e.htm.

Additional information on these programs and key results for the reporting period can be found at http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp.

Forest losses are addressed through the provision of balanced social, economic and environmental information and advice — Natural disturbances, such as fires and insects, can have major impacts on Canada's forests. A continuing priority for NRCan is to develop the knowledge, tools and sustainable management strategies needed to help mitigate losses from these disturbances and to develop ways of integrating our knowledge of the social, economic and environmental dimensions of our forests for balanced decision making. Program delivery is on track to meet these priorities.

The mountain pine beetle (MPB) infestation in B.C. and its rapid spread eastward constitute a major threat to Alberta's forests and Canada's boreal forest. The new Federal Response to the MPB Infestation Program was implemented in 2007-08 with the Province of B.C. and other areas requiring front-line control efforts. The national response consists of three key elements: controlling the spread into Alberta and the boreal forest;

DID YOU KNOW?

An internal evaluation of the MPB Initiative (MPBI) (2002-07) shows that the program achieved its objectives to a large extent, notwithstanding the devastation and spread of the beetle. The evaluation of MPBI's R&D program found that those interviewed for the evaluation rated much of the research as outstanding. Stakeholders and researchers praised the R&D program's focused approach to funding priority research areas, its proposal mechanism, and its involvement of stakeholders at all stages. The Private and Federal Forestlands Rehabilitation Programs were also shown to have largely achieved their objectives. The MPBI's management approach was effective and oversight ensured that all programs were well coordinated, cost-effective and well communicated. The evaluation provided recommendations to improve the design of future private forestlands and First Nations programming. More details on this evaluation can be found at http://www.nrcan.gc.ca/dmo/aeb/aeb-rpts-2007-EV0702-e.htm.

protecting forests and forest communities; and recovering economic value from beetle-killed wood. Detailed information on key accomplishments under the Federal Response to the MPB Infestation Program for 2007-08 can be found at http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp and http://mpb.cfs.nrcan.gc.ca.

Under FILTCS, NRCan supported the continued development of a national forest pest strategy in 2007-08 to ensure an integrated response to this increasing threat. This work is being done under the auspices of CCFM and in collaboration with provincial and territorial governments. As well, NRCan continued to work with CCFM toward the implementation of the Canadian Wildland Fire Strategy to enhance strategic and operational coordination and cooperation among jurisdictions responsible for forest fire management in Canada.

Canada is a globally recognized leader of forest sector sustainability — In collaboration with other federal departments and national partners, NRCan is on track in delivering a wide variety of programs and initiatives aimed at positioning Canada to achieve desired forest sector outcomes in international processes; to meet international commitments; and to encourage the emulation of our high standards of sustainable forest management by other forest countries.

In October 2007, NRCan successfully renewed its program of technical cooperation with Russia that focuses on carbon budget modeling and accounting, forest fire management, forest certification and model forest development. NRCan has also been actively working with the Department of Foreign Affairs and International Trade (DFAIT) and the Canadian International Development Agency (CIDA) to advance efforts toward an international, legally binding instrument on sustainable forest management. Internationally, NRCan participated in meetings of 30 like-minded countries to advance the conceptual and tactical objectives of the proposed instrument; and nationally, NRCan coordinated the contributions of provinces and territories through the International Forestry Issues Working Group of the CCFM.

DID YOU KNOW?

The department continued to provide authoritative information, knowledge and advice regarding the state of Canada's forests overall. With specializations in biotechnology, pathology, and entomology, a bibliometrics evaluation of NRCan's scientific publications, journals and papers demonstrates that NRCan is viewed by the forest community as the authoritative source of forest science information nationally. Based on five independently ascribed performance indicators, the evaluation ranked Canada (NRCan) fifth in the world overall, second in the number of publications produced, and fourth in areas of specialization. More details on this evaluation can be found at http://www.nrcan.gc.ca/dmo/aeb/aeb-rpts-2008-e.htm.

The International Model Forest Network (IMFN) Secretariat successfully completed its move to NRCan under a multi-year agreement with the International Development Research Centre. IMFN is a voluntary association of partners from around the world working toward the common goal of sustainable forest management and use. In 2007-08, the Secretariat substantially advanced conceptual and operational planning for a circumboreal model forest initiative with the participation of Sweden and Russia. Support was also provided for the development of a proposed Mediterranean model forest network and an emerging Russian national network. More information on the IMFN can be found at http://www.imfn.net.

Canada's climate change forest-reporting obligations are met and forest-based options for adaptation to, and mitigation of, climate change are developed — NRCan is committed to developing an integrated science-based policy approach to

DID YOU KNOW?

Dr. Werner Kurz is the recipient of a 2008 Public Service Award of Excellence in the Innovation Category. The NRCan scientist received the award for advancing our scientific understanding of forests and increasing Canada's international reputation for the steps it has taken in the careful management of this most precious resource. Dr. Kurz was also recognized for his contribution to the Intergovernmental Panel on Climate Change which shared the 2007 Nobel Peace Prize with former United States Vice President Al Gore.

assist Canada's forest sector in adapting to climate change and mitigating its impact. To this end, the delivery of programs is on track and meeting expectations. Throughout 2007-08, extensive work continued on improving the forest sector's ability to understand, predict and assess changes to ecosystems as a result of climate change. NRCan has taken a lead role in determining possible climate-induced changes to natural forest disturbances, such as fire, insect infestations and disease. NRCan provided its contribution to Environment Canada's April 2007 *National Inventory Report, 1990-2005: Greenhouse Gas Sources and Sinks* which represents one of Canada's reporting commitments under the United Nations Framework Convention on Climate Change. The department also continued to improve information on forest contributions to climate change targets through the development of the National Forest Carbon Monitoring, Accounting and Reporting System.

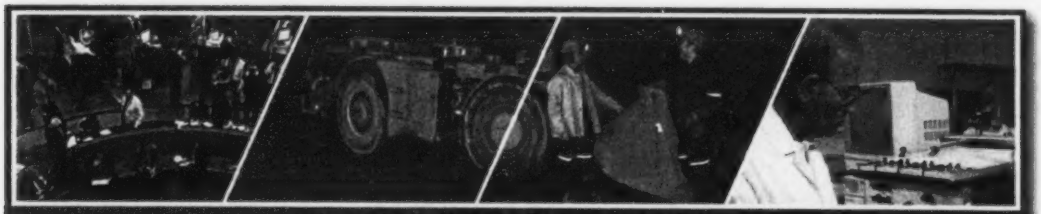
Forest-dependent communities have choices and options for economic opportunities — In collaboration with stakeholders, NRCan is on track with the development and implementation of capacity-building programs and initiatives aimed at helping forest-

DID YOU KNOW?

An internal evaluation of NRCan's forest-related climate change activities showed that the department has developed a comprehensive foundation for understanding the implications of climate change for Canadian forests. These activities have resulted in several internationally-recognized publications, as well as important forest-related input to the International Panel on Climate Change. NRCan's development of the National Forest Carbon Monitoring, Accounting, and Reporting System has played a crucial role in meeting international reporting obligations. The evaluation also noted that NRCan should work to develop an overall strategy on forest carbon monitoring, data needs assessment, and data management for climate change. Details on this evaluation can be found at http://www.nrcan.gc.ca/dmo/aeb/aeb-rpts-2008-e.htm.

dependent communities manage forest sector transition challenges and seize new forest-based economic opportunities. In July 2007, NRCan launched the new 5-year $25-million Forest Communities Program and entered into long-term funding arrangements with 11 local community organizations from across Canada to develop and share new knowledge, tools and best practices in such areas as innovative forest tenure arrangements, the valuation of ecological goods and services, bioenergy and youth engagement in forestry. The program is establishing community level projects and is expanding to also support national and international initiatives with federal partners, provincial governments and non-government organizations that share common interests and objectives. Additional information can be found at http://cfs.nrcan.gc.ca/index/fcpgm.

In 2007-08, the $5-million per year First Nations Forestry Program (FNFP) — a jointly funded forestry capacity-building initiative by NRCan and INAC — supported approximately 150 capacity-building partnership projects across Canada to assist First Nations at the community level to sustainably manage their forest resources and participate in forest-based opportunities, both on and off reserve. More information on FNFP projects and its achievements can be found at http://www.fnfp.gc.ca.



Minerals & Metals Program Activity

Canadians derive sustainable social and economic net benefits from the assessment, development and use of mineral expertise, mineral resources, and related industries

Planned Spending / FTEs
$57.5M / 593

Actual Spending / FTEs
$75.7M / 645

Investment in Canada's exploration and mining industries is strengthened

Actual Spending: $4.6M

Market access for mineral and metal commodities (including recyclables) and related industries is promoted and, where necessary, protected; Canada's international prominence and investment in mining are secured

Actual Spending: $4.6M

NRCan Priorities:
- Smarter, Faster and More Effective Regulation
- Strengthening Canada's Mining Industry

Government of Canada Outcome:
- Strong Economic Growth

Canadians benefit from R&D with respect to minerals, metals and value-added products

Actual Spending: $34.4M

The safety and security of workers and the public throughout Canada are improved with respect to explosives

Actual Spending: $7.6M

Canadians are provided with information to improve decisions regarding minerals and metals; Regulatory programs meet Government of Canada's objectives

Actual Spending: $6.1M

Policies enhance the productivity and sustainability of the minerals and metals industries

Actual Spending: $18.4M

The Minerals and Metals Program Activity promotes the sustainable development and responsible use of Canada's mineral and metal resources. A fundamental objective of the program is to develop technologies and solutions to problems in order to increase the competitiveness of the mining and processing industries; and to use new materials and processes to enhance the competitiveness of the manufacturing, transportation and energy sectors. The program activity includes significant international activities to address barriers to market access and to transfer knowledge on Canada's model for sustainable mineral resource development. Minerals and metals activities also focus on assessing the investment

climate for exploration and mining in Canada and abroad and on making policy recommendations. The program aims to increase the contribution of mineral development to the prosperity and well-being of Aboriginal and northern communities.

Key Achievements

Investment in Canada's exploration and mining industries is strengthened — NRCan is meeting expectations with the delivery of programs that promote an internationally competitive investment climate for the mineral industry within Canada. Based on 2007 exploration budget data, Canada has excelled in attracting the attention of investors in search of new mineral deposits. With more than 21 percent of the world's total exploration budget ($2.7 billion in 2007), Canada remained the single largest exploration investment recipient in the world.

Over the reporting period, NRCan, working with the Canada Revenue Agency, Finance Canada and the provinces and territories, was able to clarify the wording of the federal *Income Tax Act* so that the costs of consulting with Aboriginal and other communities, and of conducting certain environmental studies, are recognized as eligible for the 100 percent tax deduction accorded Canadian Exploration Expenses and to funding using flow-through shares. This change provides incentives for good social and environmental practices by companies conducting exploration. In addition, the Mining Exploration Tax Credit, which is the key component of super-flow-through shares, was extended for another year in Budget 2008.

In addition, the Government of Canada took steps in late 2007 to ensure that the economies of Cape Breton Island and Nova Scotia could benefit from a new coal development opportunity. When the *Donkin Coal Block Development Opportunity Act* received Royal Assent in December 2007, the legal framework was established to facilitate the exploitation of coal and to regulate employment at any Donkin mine.

Despite intense competition from other countries, Canada has maintained its lead position in worldwide exploration and mineral development related equity financing. In 2007, Canadian-based companies raised more than $19 billion through Canadian financial institutions, or just under 36 percent of all equity — worldwide — for mineral exploration and development.

Despite this recent success, Canadian proven and probable (mineable) reserves of base metals and precious metals have been generally declining for more than twenty-five years. However, sustained high levels of exploration have led to modest improvements in the reserves of most base metals. Nonetheless, this issue will need to be tracked closely to assess the ongoing status of known reserves.

Market access for mineral and metal and related industries is promoted and, where necessary, protected; Canada's international prominence and investment in mining are secured — The Government of Canada advocates a risk-based approach for minerals and metals to identify and address risks to human and environmental health. NRCan is meeting expectations or is on track with the delivery of related programs. Working with other departments to avoid unnecessary barriers to trade, NRCan engaged in discussions with the World Trade Organization and a coalition of other nations concerning the scientific basis for European Union proposals to classify and

label nickel compounds on the basis of hazard characteristics. NRCan also provided ongoing secretariat support and participated in the third annual meeting of the Intergovernmental Forum on Minerals, Metals, Mining and Sustainable Development. This international forum discussed intergovernmental collaboration in support of mines ministries' engagement in the development of national and regional positions for the U.N. Commission on Sustainable Development's review on mining in 2010-11.

During the reporting period, NRCan worked with its counterpart agencies in the Government of Chile to develop a Memorandum of Understanding regarding Cooperation on Sustainable Development of Minerals and Metals, which is a deliverable of the Canada-Chile Partnership Framework. Discussions focused on areas of common interest, including S&T cooperation on environmental technologies and processes, Canada's mining cluster model, mine closure and rehabilitation, market access, transparency, corporate social responsibility and sustainable development.

In February 2007, the Government of Canada announced its official support for the Extractive Industries Transparency Initiative (EITI). This international coalition of governments, industries, investors and non-governmental agencies supports improved governance in resource-rich countries through the full publication and verification of company payments and government revenues for oil and gas and mining industries. The goal of EITI is to foster greater transparency and accountability in the extractive sectors to help natural resources generate large revenues in order to foster economic growth and reduce poverty (http://www.nrcan-rncan.gc.ca/media/spedis/2007/200768-eng.php) or (http://www.eitransparency.org).

Canadians benefit from research and development with respect to minerals, metals and value-added products — NRCan is meeting expectations with the delivery of related programs. An example is the department's participation with industry partners in the first phase of an international research initiative that seeks to replace conventional blasting with novel, energy-efficient alternatives. The Explosive-Free Rock Breaking Technical Committee, a joint NRCan and industry initiative, is conducting a global search for further promising technology, knowledge and expertise for advancement and adaptation for the Canadian mining industry. This undertaking represents a great opportunity for NRCan to demonstrate world leadership in a major research initiative that impacts the productivity, energy efficiency, and sustainability of the Canadian mining industry.

In partnership with Georgian BioFuels, NRCan successfully tested a B50 (50 percent blend) biodiesel fuel to determine the impact on emissions quality. As a test project, the Quinsam mine in British Columbia is adopting a clean engine package with the potential to be powered by a renewable resource fuel. In certifying diesel engines destined for use in underground mines, NRCan laboratories also prescribe the amount of clean ventilation air required underground to dilute emissions in order to protect mine workers' health.

In Budget 2007, the Government of Canada committed to provide $6 million per year

DID YOU KNOW?

In collaboration with Canadian mining equipment manufacturer Mining Technologies International, NRCan helped develop the world's first hybrid mining vehicle — a diesel-electric scoop tram. NRCan is now helping to evaluate the hybrid system, first at the Experimental Mine in Val-d'Or and then at four mining operations for a period of three months each. The hybrid scoop tram is expected to have a significant positive impact on the health of mine workers, the economic viability of underground mining operations and the energy costs associated with ventilation. This innovative achievement could also open up important new market opportunities for the only Canadian manufacturer of scoop trams.

to help relocate the CANMET Materials Technology Laboratory to new state-of-the-art facilities at McMaster University's Innovation Park in Hamilton, Ontario. The investment is in addition to the $40 million that was allocated in Budget 2006 to help NRCan reposition the laboratory as a leader in research for the steel, automotive materials and other metal-manufacturing industries.

Two major initiatives began during the reporting period toward developing materials technologies to reduce greenhouse gas emissions. NRCan began funding research to help the automotive industry develop lighter-weight vehicles through the development of higher-performance structural materials that continue to meet the safety requirements of Canadians. NRCan also began working with industry, universities and partners in the United States and China on a five-year, $22 million project to study the use of magnesium in the front of automobiles. The goal is to reduce the weight of vehicles by 60 percent and to subsequently improve fuel efficiency and significantly reduce GHG emissions.

A joint NRCan-industry project team has developed and patented a new technology to detect cracks on a metal's surface, such as aircraft skins, oil and gas pipeline surfaces, and other structures. The device can detect and measure cracks of various sizes and angles below the surfaces of metals covered with protective coatings. In addition, NRCan conducted research to develop recommendations to the Canadian Standards Association on the types of coatings for use in the Mackenzie Valley Pipeline project.

The safety and security of workers and the public throughout Canada are improved with respect to explosives — Over the reporting period, NRCan has met all program expectations related to the safety and security of workers and explosives. In 2008, the department published new restricted components regulations to help protect Canadians from the threat of criminal and terrorist bombings in the Canada Gazette Part II. These regulations restrict the purchase of nine potentially explosive chemicals to persons who have a legitimate need for

them. These chemicals, known as explosives precursors, are not themselves explosives but can be used to fabricate homemade explosives. As part of the process, extensive consultations were held with the Royal Canadian Mounted Police, the Canadian Security Intelligence Service, and explosives regulators worldwide as well as with various stakeholder groups to ensure minimal negative business impacts and consistency with the directions being taken in other countries around the world. Consultations were also completed on the revised user fees for the explosives safety program. In addition, NRCan has signed an agreement with DFAIT to provide expert advice on blast effects and their mitigation to assist with the development of standards for embassy protection and ensure the quality of blast-protection work done by third parties. More information can be found at http://www.nrcan-rncan.gc.ca/mms/explosif/over/over_e.htm.

Canadians are provided with information to improve decisions regarding minerals and metals; regulatory programs meet Government of Canada objectives — Program expectations have all been met. Among statistics and information created over the past year, NRCan produced the 2007 version of the *Principal Minerals Areas of Canada Map (900A)* and a New Exploration Map of the top 100 off-mine-site exploration and deposit appraisal projects of 2007, based on expenditures.

NRCan chaired the Kimberley Process Working Group on Statistics and is a member, in good standing, of the Working Group of Diamond Experts. Work is currently underway on many issues, including increased cooperation with the United Nations and improved transparency, interim measures to address non-compliance, revised peer review procedures, ensuring the submission of annual

DID YOU KNOW?

In 2007, the federal, provincial and territorial mines ministers agreed that regulatory improvement is a priority and acknowledged the importance of the new Major Projects Management Office (MPMO) at NRCan. The goal of the MPMO is to improve coordination with Canada's regulatory system by providing industry with a single, efficient point of entry into the federal process.

statistics and reports, and procedures for admitting new participants.

Policies enhance the productivity and sustainability of the minerals and metals industries — At the 64th Annual Mines Ministers' Conference (MMC), federal, provincial and territorial mines ministers agreed to press forward in key areas to support the competitiveness of the mining sector. The ministers unanimously agreed that engagement between governments, Aboriginal peoples, communities, industry and other interested parties is essential to ensuring the long-term sustainability of Canada's mining sector. As a result, the ministers directed that approaches be explored, including the development of best practices involving government, industry and Aboriginal peoples. In addition, MMC endorsed the creation of the Canadian Mining Innovation Council and asked that it develop a pan-Canadian mining research and innovation strategy. Participants reaffirmed their support for strengthening Canada's public geoscience information to stimulate exploration for new mineral resources. They also agreed to develop concrete, practical approaches to address the shortage of skilled labour that affects all resource sectors. In support of this initiative, cooperative work began to share accurate labour market information and intelligence — through the Mining Industry Human Resources Council — to improve inter-provincial mobility for mining sector workers, to develop information tools for employers and Aboriginal peoples, and to increase Aboriginal participation in the mining industry.

In partnership with the Prospectors and Developers Association of Canada, the Mining Association of Canada, the Canadian Aboriginal Minerals Association and INAC, NRCan released a *Mining Information Kit for Aboriginal Communities* in 2006. In 2008, the Canadian Embassy in Lima translated and adapted this kit for use by Indigenous communities and Canadian mining companies in Peru. Based on the Canadian model, the adapted kit provides basic explanations of the mining life cycle and applicable laws and regulations as well as highlighting local community experiences in mining. This adaptation could also serve as the basis for further versions in other Latin American countries and as a central element in the delivery of community workshops. Furthermore, NRCan and the Mining Industry Human Resources Council have initiated and secured funding for a new publication to support Aboriginal participation in mining — *Mining Industry Human Resources Guide for Aboriginal Communities*. The department has met all related program expectations.

Corporate Management Program Activity

NRCan is enabled by supportive corporate management functions

This program activity[1] deals with results-based management and internal governance. In short, it is about the people, tools and supporting mechanisms required by the department to deliver on its mandate, mission and departmental priorities. Integrated and effective corporate management and services also help NRCan reposition its program enablers to deliver on the Government of Canada's agenda for management improvement.

Key Achievements

Through NRCan's North Star initiative, the department is strategically transforming itself to become a more dynamic, collaborative and results-based organization. Our new natural resources policy framework gives focus and scope to departmental activities, enabling a shift from a sectoral approach to a more integrated model focused on a shared departmental vision and strategic outcomes that serve Canadians. Organizational changes — including a united science and policy function, cross-sectoral task groups on horizontal issues, and the introduction of collaborative communication and engagement tools — are changing the way we work internally and with stakeholders.

Regarding portfolio coordination, NRCan cooperated with portfolio agencies on common policy issues and reports to Parliament, and it provided assistance with appearances before House and Senate Parliamentary Committees. The department is currently assessing options to improve the portfolio coordination function. As a result, the Minister of Natural Resources will receive integrated advice on a more timely basis.

NRCan and the public service as a whole are facing unprecedented human resources (HR) and talent management challenges arising from an aging workforce, a competitive labour market, and critical skill shortages. In response to these challenges, NRCan developed a fully integrated HR plan incorporating sector-specific plans into one document at the departmental level. To maintain NRCan's representation of all four designated employment equity groups, numeric goals were established for the recruitment and promotion of visible minorities in the executive cadre, and women as research scientists. As well, a HR Renewal Committee

[1] The resources for this program activity are distributed across all other program activities.

DID YOU KNOW?

The Major Projects Management Office officially opened its doors on February 26, 2008. This marks an important step toward improving the management and performance of the federal regulatory system for major natural resources projects. Key accomplishments during the reporting period include securing the approval of a Cabinet Directive on Improving the Performance of the Regulatory System for Major Resource Projects and negotiating a Memorandum of Understanding between the key regulatory departments most involved in natural resource projects[2] to clarify the roles and responsibilities of departments in implementing the new Directive, including further guidance on how departments will work together to improve the accountability, transparency, timeliness and predictability of the federal regulatory system for major resource projects. More information on this horizontal initiative for which NRCan is the lead department can be found at http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp.

has been created to set the department's strategic direction for talent management. The department has begun implementing strategies for corporate-wide talent management, fostering a learning environment, a quicker and more collective approach to staffing across the department, and enhanced recruitment of younger professionals and other highly-skilled personnel to fill mission-critical and other specialized positions.

As a knowledge-based organization, NRCan approved an Enterprise I-Strategy to serve as a foundation for the development of the department's Enterprise Information Management and Technology (IMT) Strategic Plan. The plan will guide the development and governance of the department's IM/IT environment at an enterprise level in support of the effective delivery of programs. In addition, a pathfinder project with Library and Archives Canada was completed to assess the viability of an innovative risk-based approach for the disposal of records. Based on the success of this pathfinder, this approach will be implemented on a broader scale with the Government of Canada.

Recapitalization of NRCan's real property holdings remains an ongoing challenge since the current capital allocation is well below the investment levels required to prevent the progressive deterioration of facilities. To temporarily bridge this gap and the associated risks of the decaying infrastructure, funding was acquired from the TB Management Reserve for priority health and safety projects totalling $8.3 million over three years. Building on the strength of a long-term capital plan, a well-developed real property management framework and a real property

[2] Natural Resources Canada, Canadian Environmental Assessment Agency, Department of Fisheries and Oceans, Indian and Northern Affairs Canada, Transport Canada, Environment Canada, National Energy Board, and Canadian Nuclear Safety Commission.

strategy for the National Capital Region, national portfolio rationalization and the development of strategic replacement projects continues. In 2007, a qualitative review assessed the potential of a public-private partnership option to replace two deteriorated facilities located at the Booth Street Complex.

Through innovative approaches to internal shared services, NRCan generated more than $5.5 million in cumulative savings and took steps to increase overall client satisfaction by the end of 2007-08. These improvements include the introduction of innovative business tools such as e-procurement; streamlining of end-to-end processes, including the introduction of express-lane staffing; ongoing client-focused service delivery; and an enterprise approach to fleet management and IT purchasing.

Moreover, NRCan developed a concept paper for the effective integration of classified information in departmental policies and programs which sets out a more efficient process for making confidential documents for departmental use.

NRCan also continued to manage its Management Accountability Framework assessment results which are available at http://publiservice.tbs-sct.gc.ca/maf-crg/assessments-evaluations/2006/rsn/rsn_e.asp.

Departmental Link to Government of Canada Outcomes

1. Departmental Link to Government of Canada Outcomes

Strategic Outcome				
Canadians derive sustainable social and economic benefits from the assessment, development and use of energy, forest and mineral resources, and have the knowledge to mitigate environmental impacts and respond effectively to natural and man-made hazards				
($ millions)	**Actual Spending 2007-08**			
Program Activities	**Budgetary**	**Non-Budgetary**	**Total**	**Alignment to GoC Outcome Areas**
Earth Sciences*	251.6		251.6	Strong Economic Growth
Energy	419.1		419.1	A Clean and Healthy Environment
Sustainable Forest	206.7		206.7	Strong Economic Growth
Minerals and Metals	75.7		75.7	Strong Economic Growth
Sub-Total	**953.1**		**953.1**	
Statutory Payments – Atlantic Offshore				
Energy**	2,388.0		2,388.0	
Total NRCan	**3,341.1**		**3,341.1**	

* Includes the Earth Sciences – Geomatics Canada Revolving Fund.

** Actual spending includes: Nova Scotia Offshore Revenue Account $493.2 million; Newfoundland Offshore Petroleum Resource Revenue Fund $1.7 billion; and Newfoundland Fiscal Equalization Offset Payments $188.6 million. These expenditures were largely offset by oil and gas royalty revenues received during the year ($1.7 billion). Pursuant to the Atlantic Offshore Accords, NRCan receives the federal royalty revenues related to the offshore – which were greater than planned due to significant increases in oil prices and production – and subsequently makes payments to the provinces equivalent to the royalty revenues received. Refer to page 72 for more information on revenues.

2. Comparison of Planned to Actual Spending (including FTEs)

($ millions)	2005–2006 Actual	2006–2007 Actual	2007–2008			
			Main Estimates	Planned Spending[1]	Total Authorities	Actual Spending[1]
Program Activities						
Earth Sciences[2]	224.7	238.6	233.3	233.8	265.7	251.6
Energy	572.4	491.8	543.2	543.3	543.1	419.1
Forest[3]	158.7	178.1	262.8	268.3	262.2	206.7
Minerals and Metals[4]	73.8	74.3	55.3	57.5	77.8	75.7
Sub-Total	**1,029.6**	**982.8**	**1,094.6**	**1,102.9**	**1,148.8**	**953.1**
Statutory Payments – Atlantic Offshore						
Energy[5]	650.4	702.9	1,050.5	1,050.6	2,391.6	2,388.0
Total	**1,680.0**	**1,685.7**	**2,145.1**	**2,153.5**	**3,540.4**	**3,341.1**
Less: Non-respendable revenue	(564.9)	(468.3)	(498.7)	(1,041.6)	(1,894.6)	(1,894.6)
Plus: Cost of services received without charge	43.0	40.1	40.1	40.1	39.8	39.8
Total Departmental Spending	1,158.1	1,257.5	1,686.5	1,152.0	1,685.6	1,486.3
FTEs	4,565	4,379	4,456	4,289	4,289	4,320

1. The resources for the Corporate Management Program Activity are distributed across all other program activities.
2. Includes the Earth Sciences – Geomatics Canada Revolving Fund.
3. Actual spending was less than planned for the Federal Response to the Mountain Pine Beetle Infestation in British Columbia because funding in the amount of $43.6 million was transferred to Western Economic Diversification and to Transport Canada, thereby reducing planned expenditures within NRCan. Moreover, funding for the Forest Industry Long Term Competitiveness Initiative in the amount of $10.4 million was deferred for future year spending.
4. Actual spending was higher than anticipated in program management and support in the amount of $13.6 million which reflects a change in reporting of some corporate activities (i.e. shared services, communications and information technology). Funding received via the Supplementary Estimates for the Relocation and Renewal of the CANMET Laboratories of $2.2 million also contributed to higher than planned spending.
5. Actual spending includes: Nova Scotia Offshore Revenue Account $493.2 million; Newfoundland Offshore Petroleum Resource Revenue Fund $1.7 billion; and Newfoundland Fiscal Equalization Offset Payments $188.6 million. These expenditures were largely offset by oil and gas royalty revenues received during the year ($1.7 billion). Pursuant to the Atlantic Offshore Accords, NRCan receives the federal royalty revenues related to the offshore – which were greater than planned due to significant increases in oil prices and production – and subsequently makes payments to the provinces equivalent to the royalty revenues received. Refer to page 72 for more information on revenues.

3. Voted and Statutory Items

Voted or Statutory Item	Truncated Vote or Statutory Wording	2007–2008 ($ millions)			
		Main Estimates	Planned Spending	Total Authorities	Actual Spending[1]
1	Operating expenditures	709.3	712.2	753.8	674.4
5	Capital expenditures	2.7	2.7	4.4	4.2
10	Grants and contributions	328.1	333.6	320.3	211.4
(S)	Minister of Natural Resources — salary and motor car allowance	0.1	0.1	0.1	0.1
(S)	Contributions to employee benefit plans	54.4	54.4	57.9	57.9
(S)	In support of infrastructure costs directly or indirectly relating to the exploration, development, production or transportation of oil and gas in the offshore area of Nova Scotia	1.9	1.9	2.4	0.6
(S)	Contribution to the Canada/ Newfoundland Offshore Petroleum Board	5.0	5.0	2.2	2.2
(S)	Contribution to the Canada/Nova Scotia Offshore Petroleum Board	2.9	2.9	2.6	2.6
(S)	Payments to the Nova Scotia Offshore Revenue Account	450.0	450.0	493.2	493.2
(S)	Payments to the Newfoundland Offshore Petroleum Resource Revenue Fund	590.7	590.7	1,701.0	1,701.0
(S)	Newfoundland Fiscal Equalization Offset Payments	0.0	0.0	188.6	188.6
(S)	Grant to the Canada Foundation for Sustainable Development Technology	0.0	0.0	1.6	1.6
(S)	Spending of proceeds from the disposal of surplus Crown Assets	0.0	0.0	0.7	0.3
(S)	Geomatics Canada Revolving Fund	0.0	0.0	11.6	3.0
	Total	2,145.1	2,153.5	3,540.4	3,341.1

1. Actual spending includes the following statutory payments: Nova Scotia Offshore Revenue Account $493.2 million; Newfoundland Offshore Petroleum Resource Revenue Fund $1.7 billion; and Newfoundland Fiscal Equalization Offset Payments $188.6 million. These expenditures were largely offset by oil and gas royalty revenues received during the year ($1.7 billion). Pursuant to the Atlantic Offshore Accords, NRCan receives the federal royalty revenues related to the offshore – which were greater than planned due to significant increases in oil prices and production – and subsequently makes payments to the provinces equivalent to the royalty revenues received. Refer to page 72 for more information on revenues.

Actual program spending under Votes 1, 5 and 10 was $890 million in total compared to $1078.5 million in Total Authorities. $133.9 million of these lapsed funds were frozen and represent funding approved for reallocation to other departments ($43.4 million to Western Economic Diversification) or reprofiled for use in future years ($90.5 million).

Listing of Tables Available Electronically

To obtain information on tables 4 to 15, visit the Treasury Board Secretariat Web site at http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/index-eng.asp.

4. **Loans, Investments, and Advances**
5. **Sources of Respendable and Non-Respendable Revenues by Program Activity**
6. **Geomatics Canada Revolving Fund**
7. ***User Fees Act* / Policy on Service Standards for External Fees**
8. **Transfer Payments Programs Exceeding $5 Million/Year**
9. **Foundations (Conditional Grants)**
10. **Sustainable Development Strategy**
11. **Response to Parliamentary Committees and External Audits**
12. **Internal Audits**
13. **Internal Evaluations**
14. **Travel Policies**
15. **Horizontal Initiative – Improving the Performance of the Regulatory System for Major Natural Resources Projects**

16. Financial Statements

The department has prepared financial statements in accordance with the Treasury Board Accounting Standard.

- Statements for the Geomatics Canada Revolving Fund (GCRF) have been posted at http://www.nrcan.gc.ca/css/fmb/fmb-e.htm. Note than electronic link to the GCRF financial statements is sufficient for the DPR given that the statements are included in the Public Accounts which are tabled in Parliament before the DPR.
- Statements for Natural Resources Canada can be found in the following pages.

Natural Resources Canada

Statement of Management Responsibility

Responsibility for the integrity and objectivity of the accompanying financial statements for the year ended March 31, 2008 and all information contained in these statements rests with departmental management. These statements have been prepared by management in accordance with Treasury Board accounting policies which are consistent with Canadian generally accepted accounting principles for the public sector.

Management is responsible for the integrity and objectivity of the information in these financial statements. Some of the information in the financial statements is based on management's best estimates and judgments and gives due consideration to materiality. To fulfill its accounting and reporting responsibilities, management maintains a set of accounts that provides a centralized record of the department's financial transactions. Financial information submitted to the *Public Accounts of Canada* and included in the department's *Departmental Performance Report* is consistent with these financial statements.

Management maintains a system of financial management and internal control designed to provide reasonable assurance that financial information is reliable, that assets are safeguarded and that transactions are in accordance with the *Financial Administration Act*, are executed in accordance with prescribed regulations, within Parliamentary authorities, and are properly recorded to maintain accountability of Government funds. Management also seeks to ensure the objectivity and integrity of data in its financial statements by careful selection, training and development of qualified staff, by organizational arrangements that provide appropriate divisions of responsibility, and by communication programs aimed at ensuring that regulations, policies, standards and managerial authorities are understood throughout the department.

The mandate of the Audit and Evaluation Committee of Natural Resources Canada (NRCan), is to review and provide advice to the Deputy Minister on: NRCan Audit and Evaluation Polices; NRCan Annual Internal Audit and Evaluation Plans, Internal Audit, Evaluation and Special Review Reports, including management responses and commitments to implement remedial action; and the implementation in NRCan of the October 2005 Treasury Board Policy on Internal Audit.

The financial statements of the department have not been audited.

Cassie J. Doyle
Deputy Minister

AUG 0 6 2008

Date signed
Ottawa Canada

Richard S. Tobin
Senior Financial Officer

AUG 0 6 2008

Date signed
Ottawa, Canada

Natural Resources Canada
Statement of Operations (Unaudited)
For the year ended March 31
(in thousands of dollars)

	2008	2007
Expenses (Note 4)		
Energy	2,964,841	1,273,151
Earth Sciences	271,065	339,872
Forest	211,343	218,918
Mineral and Metals	87,529	118,442
Total expenses	3,534,778	1,950,383
Revenues (Note 5)		
Energy	2,215,238	465,050
Earth Sciences	8,849	16,466
Mineral and Metals	9,208	8,142
Forest	2,541	2,493
Total revenues	2,235,836	492,151
Net cost of operations	1,298,942	1,458,232

The accompanying notes form an integral part of these financial statements.

Natural Resources Canada
Statement of Financial Position (Unaudited)
As at March 31
(in thousands of dollars)

	2008	2007
ASSETS		
Financial assets		
Accounts receivable and advances (Note 6)	333,969	14,985
Loans receivable (Note 7)	90,573	95,555
Investment (Note 8)	164,159	164,159
Total financial assets	588,701	274,699
Non-financial assets		
Prepayments (Note 9)	6,649	8,671
Inventories	8,621	10,978
Tangible capital assets (Note 10)	74,729	81,367
Total non-financial assets	89,999	101,016
TOTAL	678,700	375,715
LIABILITIES		
Accounts payable and accrued liabilities	830,315	431,097
Vacation pay and compensatory leave	24,620	25,818
Deferred revenue	456	-
Employee severance benefits (Note 11)	63,991	64,858
Environmental liabilities (Note 12a)	336,679	387,793
Other liabilities (Note 13)	31,641	32,426
Total liabilities	1,287,702	941,992
Equity of Canada	(609,002)	(566,277)
TOTAL	678,700	375,715

Contingent Liabilities (Note 12b)
Contingent Recoveries (Note 15)
Contractual Obligations (Note 16)

The accompanying notes form an integral part of these financial statements.

Natural Resources Canada
Statement of Equity of Canada (Unaudited)
As at March 31
(in thousands of dollars)

	2008	2007
Equity of Canada, beginning of year	(566,277)	(274,996)
Net cost of operations	(1,298,942)	(1,458,232)
Current year appropriations used (Note 3)	3,341,056	1,685,732
Revenue not available for spending	(2,198,908)	(451,906)
Change in net position in the Consolidated Revenue Fund (Note	74,263	(106,931)
Services received without charge from other government departments (Note 17)	39,806	40,054
Equity of Canada, end of year	(609,002)	(566,277)

The accompanying notes form an integral part of these financial statements

Natural Resources Canada
Statement of Cash Flow (Unaudited)
For the year ended March 31
(in thousands of dollars)

	2008	2007
Operating activities		
Net cost of operations	1,298,942	1,458,232
Non-cash items:		
Amortization of tangible capital assets	(15,037)	(15,465)
Gain (loss) on disposal of tangible capital assets	121	(62)
Services provided without charge	(39,806)	(40,054)
Variations in Statement of financial position:		
Increase (decrease) in accounts receivable and advances	318,984	(51)
Decrease in loans receivable and investments	(4,982)	(5,981)
Decrease in prepayments	(2,022)	(3,808)
Decrease in inventory	(2,357)	(2,174)
Increase in liabilities	(345,710)	(273,433)
Cash used by operating activities	1,208,133	1,117,204
Capital investment activities		
Acquisitions of tangible capital assets	8,751	9,995
Proceeds from disposal of tangible capital assets	(473)	(304)
Cash used by capital investment activities	8,278	9,691
Financing activities		
Net cash provided by Government of Canada	(1,216,411)	(1,126,895)

The accompanying notes form an integral part of these financial statements.

1. Authority and Objectives

The Department of Natural Resources Canada (NRCan) was created on June 25, 1993 by the merger of the Department of Energy, Mines and Resources and the Department of Forestry. This organizational change was effected by Order in Council, pending the passage of legislation which occurred in 1994. The Department's mandate is primarily based on the Department of Natural Resources Act, the Resources and Technical Surveys Act and the Forestry Act.

NRCan's mandate is to ensure the sustainable development and responsible use of Canada's natural resources. Through innovation and partnership, the department plays a pivotal role in helping shape the enormous contributions of the natural resource sectors and related industries to the high quality of life of Canadians. NRCan fulfills its mandate through four main programs:

- The Energy Sectors connect Canadians with the latest information about smarter energy use, sources of energy and energy policy.
- The Earth Sciences Sector provides expertise to access, understand, and use Earth science information to deal with economic, environmental, and social changes. The sector collects studies and shares in disciplines such as geology, geomatics and paleontology to promote the sustainable use of Canada's natural resources.
- The Canadian Forest Service promotes the development of Canada's forests and the competitiveness of the Canadian forest sector, helping Canadians make sound decisions on the stewardship of our forests.
- The Minerals and Metals Sector is the federal government's primary source of scientific and technological knowledge and policy advice on Canada's mineral and metal resources and on explosives regulation and technology. The sector engages in innovative research and technology on Canada's mineral and metal resources, promoting their responsible development and use.

This mandate is delivered by the Department's 4,289 full time employees located in offices across Canada.

2. Summary of Significant Accounting Policies

The financial statements have been prepared in accordance with Treasury Board accounting policies which are consistent with Canadian generally accepted accounting principles for the public sector.

Significant accounting policies are as follows:

(a) Parliamentary Appropriations – NRCan is financed by the Government of Canada through Parliamentary appropriations. Appropriations provided to NRCan do not parallel financial reporting according to generally accepted accounting principles since appropriations are primarily based on cash flow requirements. Consequently, items recognized in the statement of operations and the statement of financial

position are not necessarily the same as those provided through appropriations from Parliament. Note 3 provides a high-level reconciliation between the bases of reporting.

(b) Consolidation – The accounts of the Geomatics Canada Revolving Fund have been consolidated with those of NRCan. NRCan also records an investment in Atomic Energy of Canada Limited (AECL) that is recorded at cost. The results of AECL are not consolidated in these financial statements due to the fact that NRCan is not deemed to control the Crown Corporation.

(c) Net Cash Provided by Government - NRCan operates within the Consolidated Revenue Fund (CRF), which is administered by the Receiver General for Canada. All cash received by NRCan is deposited to the CRF and all cash disbursements made by NRCan are paid from the CRF. The net cash provided by Government is the difference between all cash receipts and all cash disbursements including transactions with other departments of the federal Government made by NRCan during the year.

(d) Change in net position in the Consolidated Revenue Fund is the difference between the net cash provided by Government and appropriations used in a year, excluding the amount of non respendable revenue recorded by NRCan. It results from timing differences between when a transaction affects appropriations and when it is processed through the CRF.

(e) Revenues:

- Revenues from regulatory fees are recognized in the accounts based on the services provided in the year.
- Other revenues are accounted for in the period in which the underlying transaction or event occurred that gave rise to the revenues.
- Return on investment in Crown Corporation is recognized in the period in which the income is received.
- Revenues that have been received but not yet earned are recorded as deferred revenues.

(f) Expenses – Expenses are recorded on the accrual basis:

- Grants are recognized in the year in which the conditions for payment are met. In the case of grants which do not form part of an existing program, the expense is recognized when the Government announces a decision to make a non-recurring transfer, provided the enabling legislation or authorization for payment receives parliamentary approval prior to the completion of the financial statements;

- Contributions are recognized in the year in which the recipient has met the eligibility criteria or fulfilled the terms of a contractual transfer agreement;
- Vacation pay and compensatory leave are expensed as the benefits accrue to employees under their respective terms of employment; and
- Services provided without charge by other government departments for accommodation, the employer's contribution to the health and dental insurance plans, workers compensation, and legal services are recorded as operating expenses at their estimated cost.

(g) Employee future benefits

i. Pension benefits: Eligible employees participate in the Public Service Pension Plan, a multi employer plan administered by the government of Canada. NRCan's contributions to the Plan are charged to expenses in the year incurred and represent the total departmental obligation to the Plan. Current legislation does not require the department to make contributions for any actuarial deficiencies to the Plan.

ii. Severance benefits: Employees are entitled to severance benefits under labour contracts or conditions of employment. These benefits are accrued as employees render the services necessary to earn them. The obligation relating to the benefits earned by employees is calculated using information derived from the results of the actuarially determined liability employee severance benefits for the Government as a whole.

(h) Accounts receivables are stated at amounts expected to be ultimately realized; a provision is made for receivables where recovery is considered uncertain.

(i) Loans with significant concessionary terms are recorded on the Statement of Financial Position at their estimated net present value. A portion of this unamortized discount is brought into income each year to reflect the change in the present value of the loan outstanding. An estimated allowance for uncollectibility is recorded where appropriate. Interest revenue is recognized when earned.

(j) Repayable contributions are contributions where the recipient is expected to repay the amount advanced. Depending on their nature, they are classified as either unconditionally repayable or conditionally repayable and are accounted for differently.

i. Unconditionally repayable contributions are contributions that must be repaid without qualification. Normally, these contributions are provided with a low or no interest clause. They are in substance loans with significant concessionary terms and accounted for as such. They are recorded on the statement of financial position as loans at their estimated present value. A portion of this unamortized discount is brought into income each year to reflect the change in the present value of the contributions outstanding. An estimated allowance for un-

collectibility is also recorded where appropriate.

ii. Conditionally repayable contributions are contributions that, all or part of which become repayable, if conditions specified in the contribution agreement come into effect. Accordingly, they are not recorded on the Statement of Financial Position until such time as the conditions specified in the agreement are satisfied at which time they are then recorded as a receivable and a reduction in transfer payment expenses. An estimated allowance for un-collectibility is recorded where appropriate.

(k) Contingent liabilities – Contingent liabilities are potential liabilities which may become actual liabilities when one or more future events occur or fail to occur. To the extent that the future event is likely to occur or fail to occur, and a reasonable estimate of the loss can be made, an estimated liability is accrued and an expense recorded. If the likelihood is not determinable or an amount cannot be reasonably estimated, the contingency is disclosed in the notes to the financial statements.

(l) Environmental liabilities – Environmental liabilities reflect the estimated costs related to the management and remediation of environmentally contaminated sites. Based on management's best estimates, a liability is accrued and an expense recorded when the contamination occurs or when the department becomes aware of the contamination and is obligated, or likely to be obligated to incur such costs. If the likelihood of NRCan's obligation to incur these costs is not determinable, or if an amount cannot be reasonably estimated, the costs are disclosed as contingent liabilities in the notes of the financial statements.

(m) Inventories – Inventories consist of parts, material and supplies held for future program delivery and not intended for re-sale. They are valued at cost. If they no longer have service potential, they are valued at the lower of cost or net realizable value.

(n) Foreign currency transactions - Transactions involving foreign currencies are translated into Canadian dollar equivalents using rates of exchange in effect at the time of those transactions. Monetary assets and liabilities denominated in a foreign currency are translated into Canadian dollars using the rate of exchange in effect on March 31. Gains and losses resulting from foreign currency transactions are included in the statement of operations.

(o) Tangible capital assets – All tangible capital assets and leasehold improvements having an initial cost of $10,000.00 or more ($1,000.00 or more for the Revolving Fund) are recorded at their acquisition cost. The department does not capitalize intangibles, works of art and historical treasures that have cultural, aesthetic or historical value, assets located on Indian Reserves and museum collections.

Amortization of capital assets is done on a straight-line basis over the estimated useful life of the capital asset as follows:

Asset Class	Amortization period
Buildings	15 to 40 years
Machinery and equipment	5 to 15 years
Vehicles	3 to 10 years

(p) Measurement uncertainty – The preparation of financial statements in accordance with Treasury Board accounting policies which are consistent with Canadian generally accepted accounting principles for the public sector requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses reported in the financial statements. At the time of preparation of these statements, management believes the estimates and assumptions to be reasonable. The most significant items where estimates are used are contingent liabilities, environmental liabilities, the liability for employee severance benefits and the useful life of tangible capital assets. Actual results could significantly differ from those estimated. Management's estimates are reviewed periodically and, as adjustments become necessary, they are recorded in the financial statements in the year they become known.

3. Parliamentary Appropriations

The department receives most of its funding through annual Parliamentary appropriations. Items recognized in the statement of operations and the statement of financial position in one year may be funded through Parliamentary appropriations in prior, current or future years. Accordingly, the Department has different net results of operations for the year on a government funding basis than on an accrual accounting basis. The differences are reconciled in the following tables:

a) Reconciliation of net cost of operations to current year appropriations used

	2008	2007
	(in thousands of dollars)	
Net cost of operations	1,298,942	1,458,232
Adjustments for items affecting net cost of operations but not affecting appropriations:		
Add (Less):		
Revenue not available for spending	2,198,908	451,906
Adjustment for amounts to be charged later	(135,507)	-
Allowance for environmental liabilities	51,114	(195,645)
Adjustment for expenses related to claims	(44,701)	220
Services provided without charge	(39,806)	(40,054)
Amortization of tangible capital assets	(15,037)	(15,465)
Refunds of prior years expenditures	14,125	11,927
Amortization of unamortized discount loans	8,219	8,219
Expenses related to provisions devolved to Departments	(5,000)	-
Reductions from prepaid expenses	(3,478)	(5,225)
Adjustments of prior year accounts payable	2,684	4,130
Adjustments of previous years inventory	(2,356)	(2,174)
Vacation pay and compensatory leave	1,198	365
Employee severance benefits	866	36
Payments to Department of Justice	-	(1,319)
Other adjustments	665	(830)
	2,031,894	**216,091**
Adjustments for items not affecting net cost of operations but affecting appropriations		
Add (Less):		
Receivables, Advances, and Prepayments	1,469	1,414
Acquisitions of tangible capital assets	8,751	9,995
	10,220	**11,409**
Current year appropriations used	**3,341,056**	**1,685,732**

b) Appropriations provided and used

	Appropriations Provided	
	2008	2007
	(in thousands of dollars)	
Vote 1 — Operating expenditures	753,823	662,547
Vote 5 — Capital expenditures	4,359	3,711
Vote 10 — Transfer payments	320,282	289,501
Statutory amounts	2,461,958	782,340
Less:		
Appropriations available for future years	(10,908)	(14,305)
Lapsed appropriations — Operating	(79,465)	(21,786)
Lapsed appropriations — Capital	(138)	(562)
Lapsed appropriations — Transfer payments	(108,855)	(15,714)
Current year appropriations used	**3,341,056**	**1,685,732**

c) Reconciliation of net cash provided by Government to current year appropriations used

	2008	2007
	(in thousands of dollars)	
Net cash provided by Government	1,216,411	1,126,895
Revenue not available for spending	2,198,908	451,906
Change in net position in the Consolidated Revenue Fund		
Variation in accounts receivable and advances	(318,984)	51
Variation in accounts payable and accrued liabilities	399,218	72,732
Other adjustments	(154,497)	34,148
	(74,263)	106,931
Current year appropriations used	**3,341,056**	**1,685,732**

4. Expenses

The following table presents details of expenses by category:

	2008	2007
	(in thousands of dollars)	
Transfer payments		
Other level of government	2,549,525	732,945
Industry	85,407	135,060
Non-profit organizations	80,795	61,141
Individuals	14,469	46,259
Other countries and international organizations	2,115	1,293
Total transfer payments	**2,732,311**	**976,698**
Operating expenses		
Salary and employee benefits	427,204	432,901
Professional and special services	234,172	198,765
Allowance for environmental liabilities	(51,114)	195,645
Transportation and communication	37,590	35,269
Rentals	24,956	22,536
Utilities, materials and supplies	21,242	23,817
Acquisition of machine and equipment	20,699	21,437
Amortization	15,037	15,465
Information	8,412	8,476
Repairs and maintenance	7,074	7,828
Environmental studies research	2,465	2,538
Acquisition of land, building and work	2,013	1,092
Other	52,717	7,916
Total operating expenses	**802,467**	**973,685**
Total Expenses	**3,534,778**	**1,950,383**

5. Revenues

The following table presents details of revenues by category:

	2008	2007
	(in thousands of dollars)	
Sales of goods and services — external parties:		
Rights and privileges [1]	2,055,652	396,052
Services of non-regulatory nature	20,931	22,120
Sales of goods and information products	4,074	5,646
Services of regulatory nature	1,295	1,312
Lease and use of public property	480	324
Other fees and charges	133	182
Fines	92,911	7,870
Interest	49,669	47,764
Amortization of discount loans	8,219	8,219
Environmental Research Fund	2,168	2,468
Gains on disposal of tangible capital assets	102	44
Return on investment - Other enterprise crown corporation	36	76
Other	166	74
Total	**2,235,836**	**492,151**

[1] Revenues from rights and privileges are mainly representative of offshore royalties and oil and gas royalties. The increase in 2008 is as a result of significantly increased oil prices combined with increased production levels. Corresponding statutory contribution payments are made to the provinces. Revenues have been accounted for on an accrual basis.

6. Accounts Receivable and Advances

The following presents details of accounts receivable and advances:

	2008	2007
	(in thousands of dollars)	
Receivables from external parties [1]	330,847	6,832
Less: Allowance for doubtful accounts on external receivables	(1,253)	(1,300)
	329,594	5,532
Receivables from other federal government departments and agencies	4,213	9,240
Employee advances	162	213
Total	**333,969**	**14,985**

[1] Increase in 2008 is as a result of receivables recorded for offshore royalties attributed to 2008 but expected to be received in early 2009.

7. Loans Receivable

	2008	2007
	(in thousands of dollars)	
Unconditional Repayable Contribution to Hibernia		
Interest Assistance	39,978	39,978
Unamortized discount	(1,623)	(3,247)
Allowance for uncollectibility	-	(999)
Net unconditional repayable contribution	38,355	35,732
Loan to Nordion International Inc.	70,000	74,000
Unamortized discounts	(26,667)	(30,000)
Loan balance — Nordion	43,333	44,000
Loan to Hibernia Development Project	9,200	18,400
Unamortized discounts	(815)	(4,077)
Loan balance — Hibernia	8,385	14,323
Loan to Atomic Energy of Canada Limited	500	1,500
Total	**90,573**	**95,555**

Hibernia Interest Assistance Loan

Unconditional repayable contribution; interest free; first instalments paid on March 31, 2001. Repayment starts eight years from the first annual instalment; the first repayment date is March 1, 2009. Balance outstanding as of March 31, 2008 is $39,978,000. The estimated present value is $38,355,000 as at March 31, 2008.

Nordion International Inc. (loan)

Interest Free Loan Agreement; to be repaid over 30 semi-annual payments commencing October 1, 2000; fully secured by a financial instrument in Canada's name which guarantees that the loan will be repaid. Balance remaining as of March 31, 2008 is $70,000,000. Due to the concessionary terms of this loan, the estimated present value is $43,333,000 as at March 31, 2008.

Hibernia Development Project (loan)

Interest Free Loan Agreements; repayment in 10 consecutive equal annual instalments commencing June 30, 1999. Currently outstanding is Murphy Atlantic Offshore Oil Co. Ltd. $5,200,000 (estimated present value $4,739,000) and Mobile Canada Hibernia Co. Ltd. $4,000,000 (estimated present value $3,646,000).

Loan to Atomic Energy of Canada (AECL)

Interest bearing loan at an average floating rate of 4.368% (2007-2008); maturing September 2008. NRCan invoices AECL twice per year (May & November). As of March 31, 2008, the balance for Heavy Water Inventory loan amounted to $500,000.

8. Investment

Investment in Atomic Energy Canada Limited (AECL)

NRCan has purchased common shares of Atomic Energy of Canada Limited, a Crown Corporation, for a total value of $164,159,000.

9. Prepayments

	2008	2007
	(in thousands of dollars)	
Prepaid expenses	4,594	2,850
Prepaid transfer payments	2,055	5,821
Total	**6,649**	**8,671**

10. Tangible Capital Assets

(in thousands of dollars)

	Cost				Accumulated amortization				2008	2007
Capital asset class	Opening balance	Acquisition	Disposals and write-off	Closing balance	Opening balance	Amortization	Disposals and write-off	Closing balance	Net book value	Net book value
Land	7,905	10	-	7,915	-	-	-	-	7,915	7,905
Buildings	141,782	45	7	141,820	108,503	5,230	7	113,726	28,094	33,279
Machinery and equipment	221,723	7,228	4,690	224,261	185,905	8,785	4,657	190,033	34,228	35,818
Vehicles	12,365	1,468	1,525	12,308	8,000	1,022	1,206	7,816	4,492	4,365
Total	**383,775**	**8,751**	**6,222**	**386,304**	**302,408**	**15,037**	**5,870**	**311,575**	**74,729**	**81,367**

Amortization expense for the year ended March 31, 2008 is $ 15,037 (2007 — $15,465).

11. Employee Benefits

(a) Pension benefits: NRCan employees participate in the Public Service Pension Plan, which is sponsored and administered by the Government of Canada. Pension benefits accrue up to a maximum period of 35 years at a rate of 2 percent per year of pensionable service, times the average of the best five consecutive years of earnings. The benefits are integrated with Canada/Québec Pension Plans benefits and they are indexed to inflation.

Both the employees and the department contribute to the cost of the plan. The 2007-08 expense amounts to $58,300,000 ($57,600,000 in 2006-07), which represents approximately 2.1 times (2.2 in 2006-07) the contributions by employees.

The department's responsibility with regard to the Plan is limited to its contributions. Actuarial surpluses or deficiencies are recognized in the financial statements of the Government of Canada, as the Plan's sponsor.

(b) Severance benefits: The department provides severance benefits to its employees based on eligibility, years of service and final salary. These severance benefits are not pre-funded. Benefits will be paid from future appropriations. Information about the severance benefits, measured as at March 31, is as follows:

	2008	2007
	(in thousands of dollars)	
Accrued benefit obligation, beginning of year	64,858	64,894
Expense for the year	(1,001)	(30)
Benefits paid during the year	134	(6)
Accrued benefit obligation, end of year	**63,991**	**64,858**

12. Contingent liabilities

(a) Contaminated sites

Liabilities are accrued to record the estimated costs related to the management and remediation of contaminated sites where the department is obligated or likely to be obligated to incur such costs. The department has identified approximately 9 sites (11 sites in 2007) where such action is possible and for which a liability of $336,700,000 ($387,800,000 in 2007) has been recorded. NRCan's ongoing efforts to assess contaminated sites may result in additional environmental liabilities related to newly identified sites, or changes in the assessments or intended use of existing sites. These liabilities will be accrued by the department in the year in which they become known.

(b) Claims and litigation

Claims have been made against the department in the normal course of operations. Legal proceedings for claims totaling approximately $685,700,000 ($720,600,000 in 2007) were still pending at March 31, 2008. Some of these potential liabilities may become actual liabilities when one or more future events occur or fail to occur. To the extent that the future event is likely to occur or fail to occur, and a reasonable estimate of the loss can be made, an estimated liability is accrued and an expense recorded in the financial statements.

13. Other Liabilities

(in thousands of dollars)

	April 1, 2007	Receipts and other credits	Payments and other charges	March 31, 2008
Guarantee deposits — Oil and gas	14,061	721,160	(721,675)	13,546
Shared costs projects	11,164	16,065	(15,168)	12,061
Market development and incentive payments — Alberta	4,791	4,791	(4,891)	4,691
Shared costs agreements — Research	2,410	5,775	(6,842)	1,343
Total	**32,426**	**747,791**	**(748,576)**	**31,641**

Guarantee deposits — Oil and gas: This account was established to record securities in the form of cash, promissory notes, and bonds which are required to be issued to, and held by the Government of Canada pursuant to an Exploration License in accordance with section 24 of the *Canada Petroleum Resources Act*. These securities are a performance guarantee that the agreed exploration will be performed in the manner and time frame specified. Interest is not paid on these deposits.

Shared cost projects — This account was established to facilitate the retention and disbursement of moneys received from private organizations and other governments for cost-sharing scientific projects.

Market development and incentive payments — Alberta: This account records money received from the Government of Alberta, to encourage the expansion of natural gas market in Alberta and provinces to the East, in accordance with an agreement between the Government of Canada and the Government of Alberta dated September 1, 1981 and pursuant to section 39 of the *Energy Administration Act*. The original term of the agreement was from November 1, 1981 to January 31, 1987. As a result of the Western Accord of March 25, 1985, payments from the Government of Alberta terminated as at April 30, 1986, however, payments are being made from the account for selected programs which encourage the use of natural gas for vehicles.

Shared cost agreements — Research: This account was established to facilitate the retention and disbursement of moneys received from private industries and other governments for joint projects or shared-cost research agreements.

14. Equity of Canada

NRCan includes in its revenues and expenses the transactions of certain consolidated accounts established for specified purposes. Legislation required that the revenues of these specified purpose accounts to be earmarked and that related payments and expenses be charged against such revenues. The transactions do not represent liabilities to third parties but are internally restricted for specified purposes. NRCan has one such account entitled Environmental Research Fund. This account was established pursuant to subsection 76(1) of the *Canada Petroleum Resources Act*. The purpose of the fund is to finance environmental and social studies pertaining to the manner in which, and the terms and conditions under which, exploration development and production activities on frontier land, authorized under this Act or any other Act of Parliament, should be conducted.

Restricted — Environmental Studies Research Fund		
	Amounts (in thousands of dollars)	
	2008	2007
Opening balance	2,482	2,552
Revenues	2,168	2,468
Expenses	(2,465)	(2,538)
Closing balance	2,185	2,482
Unrestricted equity	(611,187)	(568,759)
Total equity of Canada	(609,002)	(566,277)

15. Contingent Recoveries

NRCan issues conditionally repayable contributions that become repayable if conditions specified in the contribution agreement come into effect.

Lloydminster Bi-Provincial Upgrader — Canada sold its interests in the Lloydminster Bi-Provincial Upgrader to Husky Oil in 1995. The terms of sale included an upside interest provision whereby Canada would be eligible to receive additional payments for a period of up to 20 years if the differential between light and heavy crude oil reached a certain threshold. As a result of the increase in oil prices since the date of sale, the upside interest provision was triggered and eligible payments to Canada have increased. Canada's eligibility for upside interest payments ends in 2015.

Vancouver Island Pipeline Contribution — Canada provided $50 million in support of the construction of Vancouver Island Pipeline in the early 1990's. This support was provided in the form of a repayable contribution. Repayment was contingent upon the proponent meeting certain financial conditions . Full repayment is expected to be received by 2014.

Other contingent recoveries relate to agreements entered into with proponents for early stage research and development (R&D) activities. Recoveries are contingent upon the successful commercialization of products generated by the R&D activities.

The department has estimated the contingent recoverable amounts as $130,700,000. Contingent recoveries are not recorded in the financial statements.

16. Contractual Obligations

The nature of the department's activities can result in some large mutli-year contracts and obligations whereby the department will be obligated to make future payments when the services/ goods are received. Significant contractual obligations that can be reasonably estimated are summarized as follows:

(in thousands of dollars)	2009	2010	2011	2012	2013 and thereafter	TOTAL
Transfer Payments	84,600	99,000	101,400	97,500	358,900	741,400

17. Related party transactions

The department is related as a result of common ownership to all Government of Canada departments, agencies, and Crown corporations. The department enters into transactions with these entities in the normal Course of business and on normal trade terms. Also, during the year, the department received services which were obtained without charge from other Government departments as presented in part (a).

(a) Services provided without charge:

During the year the department received without charge from other departments, accommodations, legal fees and the employer's contribution to the health and dental insurance plans. These services received without charge are as follows:

Services provided without charge	Amount (in thousands of dollars)	
	2008	2007
Accommodation provided by Public Works and Government Services	14,215	10,909
Contributions covering employer's share of employees' insurance premiums and costs paid by Treasury Board Secretariat	24,112	27,455
Worker's compensation cost provided by Human Resources Canada	248	252
Legal services provided by Department of Justice	1,231	1,438
Total	**39,806**	**40,054**

The Government has structured some of its administrative activities for efficiency and cost-effectiveness purposes so that one department performs these on behalf of all without charge. The costs of these services, which include payroll and cheque issuance services provided by Public Works and Government Services Canada and audit services provided by the Office of the Auditor General, are not included as an expense in the department's Statement of Operations.

(b) Payables outstanding at year-end with related parties:

Payables outstanding at year-end with related parties	Amount (in thousands of dollars)	
	2008	2007
Accounts payable to other government departments and agencies Canada	8,885	10,766

18. Comparative information

Comparative figures have been reclassified to conform to the current year's presentation.